



SEQUENCE LISTING

<110> Blattner, Frederick R.

Burland, Valerie

Rose, Debra J.

Mayhew, George F.

Perna, Nicole

Perry, Robert D.

Straley, Susan C.

Fetherston, Jacqueline D.

Lindler, Luther E.

Plano, Gregory V.

<120> Plasmid DNA From Yersinia Pestis

<130> 960296.95939

<140> US 09/409,800

<141> 1999-09-30

<160> 3

<170> PatentIn version 3.1

<210> 1

<211> 70559

<212> DNA

<213> *Yersinia pestis*

<400> 1

```
tttactctgc ttcgctgaat ttctgggttg atgtaaacg tctgcaactg cgtgaattgc   60
atcaacagag ccggggagca gccggcagca gaacactgag tctgctgatg cgtcagtcgg  120
gttataacgt ggtgcgctgg ctggcccga ggctgatgcg ggaatgtggt ctggcgagtc  180
gccaaaccgg aaaacctcgt taccgtggcg aacgggaggt gtcactggca tcgccagact  240
tactgaaaag gcagttaaag ccgtcggagc ccaatcgtgt gtggagtgga tatatcagct  300
atatcaaagt caatggtggc tggctgctacc tggcactggt gattgacctt tactctttcc  360
attggtgagt tatccaggca gttaccctg cggtcatac tctgcatcac tccgttcctc  420
cacagtaact gcctgtattt ctactcctg tactgccctc cttgatccga atgaaacagc  480
agcctctttt cccttgggcg cgtctccagt gcattacgcc aggctcgaca caccagctca  540
gcacccgggg atgacgatat ggcactgccc actatccgac gggagtaaac cgaagcctga  600
aaagtgaatg gctgcctgta gggggctata tggatgtcca tcatgcggtg cgagatatcg  660
gtgaatggat acaaagtat tacaacacac ccccatcggc acaatggtgg attaccgccc  720
tgtgaatacg aagagcggtg gaaaaaggct acgaagggtg cctgattttg tgatccacta  780
caggatggat ctgttggtca atgccggcat tctgtccga actgtcaaca gtttcaaagc  840
gcttcacgac aaggtgatta tcgtgatgg caagaatacg cagatggggg cgttcaattt  900
tagccaagca gccgtacagt ccaactcgga gaatgtgctg attatatggg gggacttcac  960
ggtggtacag gcgtatctgc agtattggca gtcacgtgg aataaaggaa ctgactggcg 1020
```

ttcgtgtac tgatcact ctttcgctg agtcattaat gtgatccgtg cgccaacacg 1080
 ggttatgtct gcaaaagtta agtcgctgat tcataaatc tgtgtattc tctgcgaaac 1140
 gatccttgtt tgatcttga gggggctgat atgtcgaga tcgaaaatgc agtaacttc 1200
 tcatcgaaac gtgcctacag aaaggggaac ccgttaactg gagccgagaa acaacgtatg 1260
 tctgtttccc ggaaaaaaga gacacataaa gctataaatg tgttcattca gaacgatctc 1320
 aaaaacgaac tttaacaact ctgtgaagat tcaggtttga ctgagacaga aatgattgag 1380
 cgctggattc agagagaaaa ggccgctaga actaatgcag ctggaatggc aactaagta 1440
 ctttcttgat cttcaggca gtgagtcta gattaccgat tgttaaaga attttggct 1500
 ggccacgccg taagggtgca gggaactggt tctgctaagg tgttacttg gaaccagaaa 1560
 agcaaaaacc ccgataaact tcctcatctt tggcgaggcg agaaggttac cggggcccac 1620
 ttaaaactgt atagaagctg ttgctctata caggagat atgtgcatgt tcagaaaagt 1680
 tcaatacctt ctgcgcttgt tactccttc gtgcaacata agtcgggaa ggtgtgacta 1740
 accaccaggc cctgttcaca catcattatc gacaggtaa aaaccgaat ccggaattta 1800
 cgccgcgaga gggtaaaaa accctgccgt tctgccgtaa gctgatggcg aaagccgaag 1860
 gttcacatc tegtgtgat ttccatgc acgtcgatt cgcgcttct ctgagttgc 1920
 gtcatctat gccgccgta ctacgtcggc gtgctatga tgcattactg cagggtatgt 1980
 gttccacta cgaccactg gccaccgta tccagcgtc gattaccaat ctggccattg 2040
 agtgtgtct ggcgacagag taaagagt gcaaccttc catcaccgc gccacgcgtg 2100
 cgtgcgctt ttatctgag ctggggctga ttacctacca gaccgaat gatccacaga 2160
 ttggtgtaa tattcgact gatcacgt tcacaccgc gctgtttct gcgttgatg 2220
 tgcggacgt tgctgtcga gcagccgac gcagccgct tgaatgggaa aatcagcaaa 2280
 gggagaaaca acgtctgcct agattggaga tggatgagct gatagcaaag gcatggcgtg 2340
 tcgtccgca gcgttccgt agctatcaaa ctgaacgtaa ggctcatgga ttgaaacgtg 2400

cccgtgcgcg ccgtgatgtt gaccgtacgc gccgtgacat tgaagctatc gttaaccggc 2460
 agctgacgcg tgagatagct gaggggcggg ttgtcggtaa tctggatgcg gtacgcaggg 2520
 agaaagcccg tcgctgaag gaacgcacgc tgatgtccag gaacaataac tacacccggg 2580
 tggccaccgg cgctacctga cgctgtattt actgaaaac cggttagcgc cggaggattt 2640
 cgctcgtctg cctcctgtca gtgcttgta ttgagcgat gtgacggccg ctacatgacc 2700
 tatcttctct ttccgcctt gaaaatgccc tcgaattctc ccaatatcgt cgttgaaatg 2760
 tactgattta ggttatccac agttaactgc aagggaactt ccataaagt tacaaccgat 2820
 atgttttta agcgccagcc gaactgttt taaagtgcgt ggtttctttt aaaccactga 2880
 tcagcacttc tttaaatac cttttctttt attcctataa ataaataacc tatcgtcgt 2940
 ctgccttttg gacagactat gataatgccc gcccttgacg cgaacttacg ttcgcgccgg 3000
 ttcggaaca aagaataacc tcctatcacg atgctacgag cgcataaacc cttattagt 3060
 acaacattca cgattcgacc aaaaaatac cagaccgat acatctgaga cactgcgcg 3120
 cacccttacc cactaaaag ccgccccgc cggggccaac ggcccggaac agagtggctt 3180
 tacaatgagt gttgtaacta aaattttcga gtcgtgcaa gtcgtgcgc tggaagtc 3240
 tcgaacacgc tcgtaagcgg ccctaagtc cgcctaacgc ggagatacgc cccgcctgcg 3300
 gcaaagcctt gtcgggacca ctccgaccgc gtaatgaagc acctacgcta ctttagtg 3360
 gtttagcttt gcagggagga gattgggatt ggtgaaacct atcaaaccgg aaccggctac 3420
 gccgggctat cggcgccaat tgtcaacaga gttatagtta atatccgctg gcgcctcat 3480
 gccgcgatgc ggcattgaaa agaccggctg cgactgctc gcctgtccgg taaggacatg 3540
 atataaacgt ttgtgttat aagcactttt gtggatatcg ttatgcagct gactgactac 3600
 attgacagtg tatacggaac agccgtaagc gagcgcgat ctcattattg taactcactt 3660
 ccgttatcac actctggctc cagtcaatac aacgaacctg aggtgaaata tgacgacacg 3720
 gtattctcgt agtgaacggc agcaccatct cgacgcctgg caatagagct gaatgtctaa 3780

aaaacactac tgtcggtgc atgacttgaa catgccacc ttttattact ggctcaaaca 3840
 tcatcaagat gacaccaccg ttgccattcc cctgcggtt atccccgctc gccgggtaat 3900
 accagacaat aacggtaccg aggcaagtac cctcaacctc cccaatggct gttcggtcag 3960
 ttgtcttct gctcagttac gcgctgttat gcaggcctta tccctatgtt gacgccacaa 4020
 cacatctggt tggcacgcga gccggtcgat atgcgtcgcg gtatcgcaat acattaccga 4080
 ccatctgcat cagccctggc aaggcgaagc cgcctttgtc ttttgcaaca aaggcgcgtt 4140
 cgcgtatcaa agttctcgt tggaacaaac acgggggtctg gttgtgaaga ggctgctgtt 4200
 tcattcggat cagggagggc agtacaggag taagaaatcc aggcaattac tgtggaggac 4260
 cggagtgatg cagagtatga gccgcagggg taactgcctg gataactcac caatggaaag 4320
 agtgttccga agcctgaaaa gtgaatggct gcctgtaggg ggctatatgg atgtccatca 4380
 tgcggtacga gatatcgggt aatggataca aagtattac aacacacccc catcggcaca 4440
 atggtggatt accgccctgt gaatacgaag agcaggggaa aaaggctacg aaggtgtcct 4500
 gattttgtga tccactacag caacggaata gtcctgctca gttatctgac ggacagcttc 4560
 ttcctaaat tcaggggtaa aacgtggtgt gccatagac tctcctatg ctaagatat 4620
 aggtcagatt tgtctacagg ttcgggggct ccccaatat ctacaataac taaaatcag 4680
 tggctggaag tgatatattc tgggacgggt ttaatcaatg atagatatca ccgtaaatca 4740
 gattaaagag cttttgtgtg attaacacca ctttactga gttactccca aaaatagcaa 4800
 gtcactttgg attagataaa ttgagccaag atgaatatgg cttgtgtgag cttatcctca 4860
 acgaccgagt cgttattatg ctgagggctg atgaaatatt gaatcgattg actctgttgg 4920
 ggccaatctt aggattttct ggaccagagg cgcgcagcgc cgctagtcag cttttttct 4980
 gttatagcat caatgccttg aataaggacg gcccttggtt cgcttgaggt gaagaactgg 5040
 ggctgatcgc attcaagcac ctttctctcg acgagctgaa tgttgagaac gttagcaagg 5100
 agatagcgaa cttttacgac tgggtgagct tggtcagtt accagcagaa actgcccctt 5160

catactcaat ctactcaatc ggtaaataagg g gatgagtaa agcatgaaaa gcgtgaaaat 5220
 catgggaact atgccaccgt cgatctccct cgccaaagct catgagcgca tcagccaaca 5280
 ttggcaaaaat cctgtcgggtg agctcaatat cggaggaaaa cggatatagaa ttatcgataa 5340
 tcaagtgttg cgcttgaacc cccacagtgg ttttctctc ttctgagaag gggttggtaa 5400
 gatcttttcg gggaagatgt ttaacttttc aattgctcgt aaccttactg acacactcca 5460
 tgcggcccag aaaacgactt cgcaggagct aaggtctgat atccccaatg ctctcagtaa 5520
 tctctttgga gccaagccac agaccgaact gccgctgggt tggaaagggg agcccttgtc 5580
 aggagctccg gatcttgaag ggatgcgagt ggctgaaacc gataagtttg ccgagggcga 5640
 aagccatatt agtataatag aaactaagga taagcagcgg ttggtagcta agattgaacg 5700
 ctccattgcc gagggggcatt tgttcgcaga actggaggct tataaacaca tctataaac 5760
 cgcgggcaaa catcctaate ttgccaatgt tcatggcatg gctgtggtgc catacggtaa 5820
 ccgtaaggag gaagcattgc tgatggatga ggtggatggt tggcgttgtt ctgacacact 5880
 aagaaccctc gccgatagct ggaagcaagg aaagatcaat agtgaagcct actggggaac 5940
 gatcaagttt attgcccatc ggctattaga tgtaaccaat caccttgcca aggcaggggt 6000
 agtacataac gatatcaaac ccggtaatgt ggtatttgac cgcgctagcg gagagcccgt 6060
 tgttattgat ctaggattac actctcgttc aggggaacaa cctaaggggt ttacagaatc 6120
 cttaaagcg ccggagcttg gagtaggaaa cctaggcgca tcagaaaaga gcgatgtttt 6180
 tctcgtagt tcaacccttc tacattgtat cgaaggtttt gagaaaaatc cggagataaa 6240
 gcctaataca ggactgagat tcattacctc agaaccagcg cacgtaatgg atgagaatgg 6300
 ttatccaatc catcgacctg gtatagctgg agtcgagaca gcctatacac gcttcatcac 6360
 agacatcctt ggcgtttccg ctgactcaag acctgattcc aacgaagcca gactccacga 6420
 gttcttgagc gacggaacta tcgacgagga gtcggccaag cagatcctaa aagataccct 6480
 aaccggagaa atgagcccat tatctactga tgtaaggcgg ataacacca agaagcttcg 6540

ggagctatct gatttgctta ggacgcattt gagcagtgc gcaactaagc aattggatat 6600
 gggggggggtt ttgtcggatc ttgataccat gttgggtggca ctcgacaagg ccgaacgcga 6660
 gggggggagta gacaaggatc agttgaagag ttttaacagt ttgattctga agacttacag 6720
 agtgattgaa gactatgtca aaggcagaga aggggatacc aagaattcca gtacggaagt 6780
 atccccctat catcgcagta actttatgct atcgatcgtc gaaccttcac tgcagaggat 6840
 ccagaagcat ctggaccaga cacactcttt ttctgatac gggtcactag tgcgcgcaca 6900
 taagcacctg gaaacgcttt tagaggtctt agtcaccttg tcacagcaag ggcagcccgt 6960
 gtcctctgaa acctacggct tctgaatcg attaactgag gctaagatca ccttgtcgca 7020
 gcaattgaat actctccagc agcagcagga gagtgcgaaa gcgcaattat ctattctgat 7080
 taatcgttca ggttcttggg ccgatgttgc tcgtcagtec ctgcagcgtt ttgacagtac 7140
 ccagcctgta gtgaaattcg gactgagca gtataccgca attcaccgtc agatgatggc 7200
 ggcccatgca gctattacgc tacaggaggt atcggagttt actgatgata tgcgaaactt 7260
 tacagtggac tctattccac tactgattca acttggacga agcagtttaa tggatgagca 7320
 ttgggtgaa cagagagaaa agttgcgaga gctgacgacc atcgccgagc gactgaaccg 7380
 gttggagcgg gaatggatgt gacaagtgcc ccctaagcct tgagttgata tatccgagaa 7440
 taggttaaga ttggcaatt gcttaacaat aattattttc ttattaaaaa tacctaacac 7500
 aaaaaatagc ttatatatac aaatgaaaat ttccagtatt aatctcaaca agtttctcta 7560
 ccggagaata ttaatctgga atgtgtaata gagaaaattt ttgatgctat caaattttcc 7620
 tttttgcag aaatatccaa tgtataggtg tgataggagt tattgggaat tttgttcga 7680
 gtgctgcccg tctgtccgg gttcacccat caacgattga acgtcttatt gcaatgtacc 7740
 gtttatctgg aatataaaat tcataccgct gtttaattccc tgaataagga taaataaatg 7800
 atcggaccaa tatcaciaat aaatatctcc ggtggccttat cagaaaaaga gaccagttct 7860
 ttaatcagta atgaagagct taaaaatc ataacacagt tggaactga tatatcggtat 7920

ggatcctggt tccataaaaa ttattcacgt atggatgtag aagtcatgcc cgcattggta 7980
 atccaggcga acaataaata tccggaaatg aatcttaatc ttgttacatc tccattggac 8040
 ctttcaatag aaataaaaaa cgtcatagaa aatggagtta gatcttcccg cttcataatt 8100
 aacatggggg aaggtggaat acatttcagt gtaattgatt acaaacatat aaatgggaaa 8160
 acatctctga tattgtttga accagcaaac ttaacagta tggggccagc gatgctggca 8220
 ataaggacaa aaacggctat tgaacgttat caattacctg attgccattt ctccatggtg 8280
 gaaatggata ttcagcgaag ctcatctgaa tgtgggtatt ttagtttggc actggcaaaa 8340
 aaactttaca tcgagagaga tagcctgttg aaaatacatg aagataatat aaaaggtata 8400
 ttaagtgatg gtgaaaatcc ttaccccac gataagtgg acccgatatc cccggttaact 8460
 ttttcaaac atactcaagg taaaaaacgt cttaatgaat atttaaatac taaccgcag 8520
 ggagttggta ctgtgttaa caaaaaaat gaaaccatcg ttaatagatt tgataacaat 8580
 aaatccattg tagatggaaa ggaattatca gtttcggtac ataaaaagag aatagctgaa 8640
 tataaaacac ttctcaaagt ataattgatt ttggaaatct tgctccagta tgggaatcag 8700
 gttcagttct ttctggctca tggtcaccaa catagacgct tcggattgcc tgctgtgaa 8760
 gaaacagatt aactgggggt ctacgccgga atcccagatt tttccgtcac cccagtttca 8820
 gcgctgctag agtacgggtg gtatgagccg ctacgagaag ctctaaatag taacttctc 8880
 caatggccga aaaagaaagc gttaaaaaat cacagtacgg gcatttctcg ggtttacgtt 8940
 atttgtgcag aacgcacaaa tcagggttatt agatattatt gcttatgaac gggtagtatt 9000
 cagcgaaata cagctcctaa ataactgcgc caaatagtag atcactgagg gaactcaatc 9060
 cggtttaage gatctgatca atcgctgaat atcccaaac accacaaccg gactgagtta 9120
 tgccgatcat agcaccgata ccagaaata aacgacatca gatggaaaaa attgtccata 9180
 aaacagcaga caaaaacat tccagacatc tcatcgctga tccctccca atatccgtac 9240
 caggctaaat cagagatccg gaccttttg atgacttcgg gcaaattctg ccggagtcag 9300

gttatttaac gaagaatgcg gacgaaaatg attatattct tgccgccatt gttaatttt 9360
 ctctgagca tcttcagag aaaggaaccc gtgcacgtc agacattcat ccctcagact 9420
 gccattaaat gactcgataa aggcattatc tgtaggcttt ccggggcgtg aacagtccat 9480
 cgtgaccctg tttcatacg cccatcggtc catcgacttc gagatgaatt cgctgccgtt 9540
 atctgtctgc agcctttgtg gaatacgccc cagcgaatgt ttaatatgt ccatgacagc 9600
 cacaacatca tcttcacgta acccctgacc gacctcgagc gccagacatt cagactaaa 9660
 attatccact atagttagcg ccctgaccg atgcccgttg aacagattat cagcaacgaa 9720
 atccatgctc cagcactgat ctaacgcggt cacttctgga cgtgcgtgcc tgtgcctcgt 9780
 tgtcacatgc cgccgtggac gtttgaacg tagattgaga ccctcaagat aatcgcacgg 9840
 aaaactgcat ccgtccggtg gccgtaggcc gcaagaactg gttgttcgca gggtcattgc 9900
 gtgcccggca acggatggcg tccatcctga gtctgtgga aaccgcaaaa ctcaacggcc 9960
 acgaccctta tgtctggctg cgcgatgtac tgaccgctt gccgacctgg cccaacagcc 10020
 agctcaacgc gctgtacct tacgccgaaa accgcttcag ctaattacc cgccagctta 10080
 ttgcattatt ttaatcgagc aacgcgagtt caccgttcgg ttacagtatt accatctgtt 10140
 cccgttaat ttttaaaaa atttaaggta acaatgagta tatacttat gggaaaagcc 10200
 aaaaaactaa cgaacactat aataattcga ttaacattaa tgaaaataca cggtcacct 10260
 attattaaaa taatacgact agcattataa gaaaaaatat ttttatgtt tatagtatag 10320
 gcgtgtattt aattaaggag ggaagcatga acttatcatt aagcgatct catcgtcagg 10380
 tatctcgatt ggtgcagcaa gagagcgggtg attgtaccgg gaaattaaga ggtaacgttg 10440
 ctgccaataa agaaactacc ttcaagggtg tgaccatagc cagtggagcc agagagtcag 10500
 aaaaagtatt tgctcaaact gtactaagcc acgtagcaaa tgtgttcta actcaagaag 10560
 ataccgctaa gctattgcaa agtacggtaa agcataatt gaataattat gacttaagaa 10620
 gtgtcggaac tggtaatagt gtacttgta gttacgtag tgaccaaatg acactacaag 10680

acgccaaagt gctgttgag gccgcattgc gacaagagtc gggagcgagg gggcatgtat 10740
catctcattc acattcagcc cttcacgcac cggaacccc ggtgcgtgaa ggactgcgtt 10800
cacatctaga cccagaact ccaccgttc caccgcgtga acgaccacac acttctggcc 10860
atcacggggc tggcgaagcc agagccaccg caccaagcac tgtttctct tatggcccag 10920
aagcgcgcgc agaactcagc agccgcctca ccacattgcg caatacgtg gcgccagcaa 10980
cgaatgatcc gcgttactta caagcctgcg gcggtgaaaa gctaaaccga ttagagata 11040
ttcaatgctg tcggcaaacc gcagtacgcg ccgatcttaa tgccaattac atccaggctg 11100
gtaacactcg taccatagcg tgccagtatc cgtacaatc tcaactgaa agccatttc 11160
gtatgctggc agaaaaccga acgccagtgt tggctgttt agcgtccagt tctgagatag 11220
ccaatcaaag attcggtatg ccagattatt tccgccagag tggtaacctat ggagtatca 11280
ctgtagagtc taaaatgact cagcaagttg gtctcgggta cgggattatg gcagatatgt 11340
atactttaac gattcgtgaa gcgggtcaaa aaacaatctc tgttctgtg gttcatgtg 11400
gcaattggcc cgatcagacc gcagtcagct ctgaagttac caaggcactc gttcactgg 11460
tagatcaaac agcagaaaca aaacgcaata tgtatgaaag caaaggaagt tcagcggtag 11520
gagatgactc caaattacgg ccggaatac attgccgtgc ggggtgttggc cgtactgcgc 11580
aactgattgg cgcaatgtgc atgaatgata gtcgtaatag tcagttaagc gtagaagata 11640
tggtcagcca aatgcgagta caaagaaatg gtattatggt acaaaaagat gagcaactg 11700
atgttctgat taagttggct gaaggacaag ggcgaccatt attaaatagc taatgtaaat 11760
atttattcct atgagtaaataaaaattacta agagatatac accactttgc caatcaaaga 11820
aactttaaac ctcaactaaa gtaagcaatt agttgaggtt tatctgctgt agaataattt 11880
ttaacaaaaa tataaacaac aaaattaaaa gttatgtgtc tactttatgt aacaaacga 11940
gcctgtccat aattctgtgt aatcgccact gtattaaagg tgatcgttta gacggtcacc 12000
gaactcgata ataaaacgac tcattgcaa cgcgcagttt tgtattggca tgctccattt 12060

tttcgaagca tcccggatag ccagataaat aaccttccgc accgagtcgt ccgtcgggaa 12120
 tactttgcat ttctttatcg cctgccggat cacactgttc agtgactcaa tggcattcgt 12180
 ggtgtagatg gccttgccga tatcggggcgg atagccgaag aaggtattga gattttccca 12240
 gtgtgtatgt agtccctcct attttagta ccaccgccag tgaggatctc catccagttt 12300
 ttgtcttgca tagataacgg gtggcatatt acccagtgaag ctatgcgggc gttcttcgtt 12360
 atattccgtt cgccagtcct ctgtaagcgt acggacttcg gacagtgaac ggaacaaata 12420
 catatcaagt atcactccgt gatgttctgc ccattcaacc agtgctgcag caataaatc 12480
 tggaccgtta tcaactccgta taaaagcagg atagcctctt tctgtactta atcgtccaa 12540
 aatacggacc actcgggtga ccggtatatt caagtcaatt tcaattgcca gtgcttccc 12600
 gttaaaattg taacgaacgg tgcaatagtg atccacaccc aacgcctgaa atcagatcca 12660
 gggggtaatc tgctctctg attcaggaga gtttatggtc acttttgaga cagttatgga 12720
 aattaaaatc ctgcacaagc agggaatgag tagccgggagc attgccagag aactggggat 12780
 ctcccgaat accgttaaac gttattgca ggcaaatct gagccgcaa aatatacgcc 12840
 gcgacctgct gtgtcttcac tcctggatga ataccgggat tatattcgtc aacgcacgc 12900
 cgatgctcat ccttacaaaa tcccggcaac ggtaatcgtc cgcgagatca gagaccagg 12960
 atatcgtggc ggaatgacca ttctcagggc attcattcgt tctctctcgg ttctcagga 13020
 gcaggagcct gccgttcggt tcgaaactga acccggacga cagatgcagg ttgactgggg 13080
 cactatgcgt aatggctcgt caccgcttca cgtgttcgtt gctgttctcg gatacagccg 13140
 aatgctgtac atcgaattca ctgacaatat gcgttatgac acgctggaga cctgccatcg 13200
 taatgcgttc cgcttctttg gtggtgtgcc gcgcgaagtg ttgtatgaca atatgaaaac 13260
 tgtggttctg caacgtgacg catatcagac cggtcagcac cggttccatc ctctcgtgtg 13320
 gcagttcggc aaggagatgg gcttctctcc ccgactgtgt cggcccttca gggcacagac 13380
 taaaggtgaag gtggaacgga tgggtgcagta caccgtaac agttttaca tcccactaat 13440

gactcgcctg cgcccgatgg ggatcactgt cgatgttgaa acagccaacc gccacggtct 13500
gcgctggctg cacgatgtcg ctaaccaacg aaagcatgaa acaatccagg cccgtccctg 13560
cgatcgctgg ctggaagagc agcagtccat gctggcactg cctccggaga aaaaagagta 13620
tgacgtgcat cttgatgaaa atctggtgaa cttcgacaaa caccctctgc atcatccact 13680
ctccatctac gactcattct gcagaggagt ggctgatga tggaactgca acatcaacga 13740
ctgatggcgc tcgccgggca gttgcaactg gaaagcctta taagcgcagc gcctgcgctg 13800
tcacaacagg cagtagacca ggaatggagt tatatggact tctggagca tctgcttcat 13860
gaagaaaaac tggcacgtca tcaacgtaaa caggcgatgt ataccgaat ggcagccttc 13920
ccggcggtga aaacgttcga agagtatgac ttcacattcg ccaccggagc accgcagaag 13980
caactccagt cgttacgctc actcagcttc atagaacgta atgaaaatat cgtattactg 14040
gggccatcag gtgtggggaa aacctatctg gcaatagcga tgggctatga agcagtccgt 14100
gcaggtatca aagttcgctt cacaacagca gcagatctgt tacttcagtt atctacggca 14160
caacgtcagg gccgttataa aacgacgctt cagcgtggag taatggcccc ccgcctgctc 14220
atcattgatg aaataggcta tctgccgttc agtcaggaag aagcaaagct gttcttcag 14280
gtcatcgcta aacgttacga aaagagcgca atgatcctga catccaatct gccgttcggg 14340
cagtgggatc aaacgttcgc cggatgatga gcaactgacct cagcgatgct ggaccgtatc 14400
ttacaccact cacatgtcgt tcaaatcaaa ggagaaagct atcgactcag acagaaacga 14460
aaggccgggg ttagtcaga agctaactct gagtaaaacg gtggatcaat attgggccgt 14520
tggtggagat ataagtggat cacttttcat ccgtcgttga caaaaatctc cactacattg 14580
aataatctga acctccgacc gtctgtcagg gcatcactca taaaatcgac tgaccagcag 14640
tggttcattt taagtggaat agccaaaggt tgtgatgcc gattgggcag gcgcttttta 14700
ccttttcgcc gaaagttaag cttcagtaag cgataaacgc gatatacccg ttttacattc 14760
cacgtaatc cagactgccg taacttattg aacataagac caaagccata tgccggatat 14820

tgaatgtcca atttttgtaa tacctcaaca accggtatat ccctcgcggt gtaggacaa 14880
 taatgcagca aacttcgact gataccata atccggcacc cgcgcggttc actggcctga 14940
 tattccgtca tcacgtaacg caccagttcg cgcttttcag gtaccgttaa agttttttg 15000
 ccacgacatc cttagaatt tcattgatc aactcagaga ggcatacatc tgccttaac 15060
 gtcgggtttc ctctcccg cttttcattc gctttatc agaggactcc atgccacat 15120
 atttgattt ccagttgtag taactggctt cagatccgcc gttctcgcga cagacatcct 15180
 tcacatgccg gccacctca acttcttta gaaccgcag gatctgagtt tcagtaaac 15240
 gtgctttctt cataatgacc tccgtgatt atatattaac cagagaactc cattaaacga 15300
 taagactaaa ttcagggggg actacaagat aacggggagt ggacaatacg ttaataatgc 15360
 gttattcatt tcaatacgca aatgtaattt aaactaatta tcatttagat aaatacgttt 15420
 ttaattccaa tgccccgccg gcatggcgta aaaatataaa gtatccatcc ccccaaacc 15480
 tatttattag caataaggct agctagccca ctggtaatgc aggaatacca gagatagcaa 15540
 cgaatattga ctgggatgac atcaaaataa ccataaccg gcagtcgcta caatgtgatc 15600
 ttcatccta attctctcaa ttatattgag gagcagactc tactgataaa tacccttact 15660
 tcaggggatc accgaaggag gcgtattatt attctaaatt ggctcagggg aaagaattga 15720
 tacatgactc ctgaaaaat ggttacgtaa atcaacctgg gggatattat tgcctcaata 15780
 tacagtagat atatattatc tcagccgtca gccgccgtat cctggcgcat ggcggcttct 15840
 agcaataatt tagcatcgct aagcgagagt tgttcagtac gcaagccggt cactatcact 15900
 tccctgcct tgccctgctt tagttccaaa ttagaaacgc gtggtataa gcaggcaata 15960
 tcgtgacgac tgagagccgt attttcaca tgtccagca cctcattggc aaaggctttt 16020
 tcggcggtag atatctgatg actattctct gtgagtgggt tagtttcagt gagacgaccg 16080
 gcctgcccc cggtgtccac ttgggtaatt tgttgattta ttaacgattg aagagtattg 16140
 attttcatcg agtctcctgt cgctataatt gtctctacga tattctaagt tatttatttt 16200

tgctaaacta ctgtcgtaga cgatttattt ttttaacgg cttttaaaca gaaaatcaca 16260
 ataaaaaatt attttggga atcattctca taaaacgagg atgaaaaatc caatttaggt 16320
 agataactca atcttataat agataaact aaacatatat cgatagttat tcctattctg 16380
 taactttcat ttgtcctaaa gtggtagata ttgcccgaga aagtgettca atttggccat 16440
 caatactgc gtaataata cctacctag tcttaatat acagccccct tgatccaaac 16500
 gcgcacggc agtcacctct aaatagctta ttccgggaa gtctttatgt actttagcta 16560
 ttgttcacg aatagctcct gcctgatcag ggttgaccct gaccacgact tgcttctgat 16620
 tactaccaa ggctaaagcc tcccgcacaa ctgcagtgt catagccact tgatcatagt 16680
 cattgaggat ttacgtacc gccaaaagta caacttact catctgtgtg tcgacgtggc 16740
 gataaaattg ctgacattgt aactgtgtt catgaatcaa agtcgcctgt aaggtacgag 16800
 cctcatccat gccagcctgc catcctaact gctttgttg ctcataaacc tctgggcgt 16860
 cagccaggat ctttcagca tcctgtttg cggcactaat caactcttcg gttgttaaac 16920
 tggattgta atctcggcg cgaaaatac gcagaccgca agcgagcgag agattacttg 16980
 gtattattg aacaaatggc tgcatgtagg cgtaacctgt ttgacaagt tgtgacataa 17040
 agtttgggcc agtgggcgt gtgactcggc cactaacca ggttctgacg gcgtagctaa 17100
 tgggagcggt aaactgagcc gtttacacca tgctgaggt tggggttcca ttgctgctaa 17160
 ccaaaaagcc agccccgact ggatcatggt acggctctct atttctgctg gcagcgggag 17220
 ctgccagtga gtgggccaag gcccgattag cagctcatgc tgtacaataa ttgcctta 17280
 tgtttctga ttaaccaatg tcaataattg ttgtaatggg gaggccagta cacaacggcg 17340
 aatgcctcc ccatgcagaa ctaatccaag gcgacaaagt aacagttcga gctgtgattg 17400
 aggctgcaaa ggcagcgccc ccagcccatg gggctcttca tagtcggtat caagagaaaa 17460
 ttcaccaat aaagcagcat tgagatgagc actatcgcg cactgaggta agtagggcaa 17520
 tattgaacgc cataatgatg gtaactgtc caagtgcaaa taagccgcgg ggcagaagcg 17580

caattgaaaa gaggtaatat aattttccat catcacttct tgcgttgtaa ccaaaaaatat 17640
 tgagcaagat tggctactgg caaaagcaaa ataagcaacg acaacaagcc aataagatgc 17700
 ccttttgact cttcactcac ttgaattgac agtatgctcg tgttacgagg taaatgagag 17760
 ctttgacgaa catctaccga tggcaccaaa atgacactga tgcgatcata ggccagcccc 17820
 tcaatactat tattcactaa ttgtttaatc tgaggatatgt aggtatcaaa ctgaatatct 17880
 gctgcatgct tgataaaaac cgaagcggat gctgctacac ccttcttacc ttgtttattt 17940
 tgctcttcag gcaatacgac atgcactcga gccactaata ccccgtaaat ttcagataaa 18000
 gtgcgggaga tctcttgccg cttggcataa ttaagcctcg ccaactcttc tatcggtgaa 18060
 gatatcaacc catctttggg gaacacatcc tgtaacgtgg agaaactctc gtgtggatag 18120
 cccttcggtt tgagaatatc aatagcctga gcgacatctg actcctcaac caagagctta 18180
 atcttcccat ctttgtctgg ctctttgtct gcggaaaggc cttcttgccg caacagcgca 18240
 agcatttcgt tcccttccct ctgactaatt ccggtataaa gatcaacttt gcaaccagtt 18300
 aaaaacaaga ttaatatcaa tgttgacagt gaagtcttaa ctttactag ttttcccc 18360
 cccttcgaca aggtttcaac attttggtc attcgcccg cagtcttggc gataagttct 18420
 tcttgattg ttatacggat aagtgacat tgcattagca tcaggctggt gggattatca 18480
 actgaaacag ccagcttagt gtgtaagtca cttttaaccg tcttaaaaga cttctgaata 18540
 tcactaacct ccttgaggag tgaatggccc agtccctgcg tatcttctga cattgccgca 18600
 tcaaagcgca ttatttggtc agttgttggc tctgccggcc ctaattctc cagcgtggtt 18660
 atgatcacct catcggcctg agctatttct atgttcggca ttatgtatc catatcaatt 18720
 tgatggctgt tatgaagtag gctatctaca atcgagttag acggtaatag gatcattaat 18780
 tctttattta ttaactctga taaataaggt aatccaacct ggctctcatt gggttttata 18840
 ccctctaata cttggagcaa tattgttcc caccgcttac caaacgagtc aaactgctgc 18900
 aatacactac gcaattcagg taaatctata gccggtacaa cagacccttg atgttgaccg 18960

aaacgcgcca gtaacgcctc acgtactggc gtcgcaaaa cctcaagaac ggcatggtca 19020
 ggagggttac tggcataata ttgctgccac agaacttccc gtgtctttc agcggattca 19080
 ctttttagct tattctccag ttgtgtttc agctcagatg ctaccggtg tagcgtagag 19140
 actgcctgag acgaagacat caacgatgta atggaacctc tattaagggt aaccgtcatg 19200
 ttttagtg ctccctcatt ccattcaca atgtctgtat tctaggatcc tgactcctg 19260
 cgagacgatt taaacgtgac tetaaggcgc tcccaaccc gaggcgatat tcacataagg 19320
 ctaaccaagg ttccaaatca ggataagcta atttattcc ttgttgcaag gcgcttgctg 19380
 agtccccacg gtcatcaaa gaggaaggc gaatcaattg aaccgcctct tcttcacctt 19440
 tcaaatgtaa ccattcagca atgcaattcg ctcttcgtg gtagtggtg ccggttcaa 19500
 tcagagcaat ctctgctaac agtacgtga gtttatatt catattatgg gaactctgt 19560
 aggatgcctt gcattaagtc tttcatgcta cgaactatgg ttgagttat attgtaaatt 19620
 accgaccatt tattaattga atgttgtaag tcagcaagta gcgccgggtt gtcaggctta 19680
 tcttcaatg ctgctatga gtcattaacc gctttgttg catcgtctgc tggcttctg 19740
 agcgttgag ccaccgcac taagtctgcg atatcgggtc ctttcgtaa tccagagaag 19800
 ttactcattt atttaggtc tctgctaca taatgaataa tggctatagc tgactcaaga 19860
 gcttagatt ctcttgcca aacctgatac tgcttgcat caccaccgcg catcatatct 19920
 ttttgagct tagttagtc cattctagt tgcattgga tagagcgac tgtctccacg 19980
 ttatgcagt gctcctctaa ttgtgtcgc gaggtttacc tccattgagt tggatcaca 20040
 attcccgtt tctttactc acaatcaccg catcgcgtc aatagccaga atacgaacgc 20100
 cattgttaag tatggcacct tctggatagc gttgatgatt gtcgagtacc acataaggca 20160
 ctttcctaa cgagatagct tgcacctga aattcaattc atcatgctgg ggttgcccc 20220
 cgacattgac cagttctaatt ttaggtcgat tgccaaactc ttggcgaaaa gttgttgta 20280
 gttgataaa tgaattcaat tttcatcat tgactgccc gcgtaattca atcagctcac 20340

ctttaacatt tacagtgaag tctgaatcca gaccaaattg ttcaagtaat gcatcaagcc 20400
 gcttgcggtg attaccggca atccgcactt tactttctac accgagcagc cctggcactt 20460
 cagcttgacg caggctatca atttttgct ttgtatttc ctctgacact tccccattca 20520
 attgtagcca tcccgcttgc ggtgctaaag aaacctcaat tccatggtat cccaaccgtt 20580
 gcaggatgaa ttctgcccc tgacgcagtt cttccatgct gcgcagtta agccggaatg 20640
 gaatgccatg gctctcaaga aaattttgca gtgacaagcg ggcatgatta tcttgatata 20700
 aaccagttaa taaccaaggt tcacctctt tttgggcga ttttaaacg acatcctgt 20760
 aagcagcagt tgccagcaag cgccgtactt cttgctaac aagttgtcca tcttggtat 20820
 actcgcgcca caatccgtgc cctagcagcc ccaaaaaagt caaaagcaac aataaagaaa 20880
 gaactccaag cccaatccca agtcgtgaac gaggtaacct gtcggttggc tctttctct 20940
 gcgtgggaac ctgtaacgc tctggcaaag gttgccctac ggcgacaaat gtccacagta 21000
 aaaaacctac ttccagacaa gagcccgcc gaagaagagt cccaacggc acgggaagcc 21060
 cttctgtag tagaggttct gcagaatcag ttaggcgaat accttctca tcgaccatca 21120
 gcactaaatg cacgggtgct atttcgtgt cagaaagaac aatatctgac tgcaacgggt 21180
 ctgaacaaa aacacagcgc ccatgaggaa gctcaactc aacaccacgg tgcttcctt 21240
 gataaaaacg acagaccaa ctcaaatc gccacgctta ggcgtgaaa cacaccatga 21300
 ttccgcgga gtacaagcac cttcaaccac gcgccatcc aaactttgt ccatcttga 21360
 ctgagtaaga taggatgatt tattgtttg actcagccat ttctgcactt ctgcgctt 21420
 gtttaaaggc tgacactgga agccaccta taactattc aaggtagtgc ttgattaga 21480
 tattcatca acagtaaga taccagtac tagatccga ccattaccta acgctaaatg 21540
 atgcgcaata ccttcgtcaa taatccgtgg ttcgatgata aacagccgta ccgtacggcg 21600
 agttaactca cttttacggc ggaaaagtgc gccaagataa ggaatatcac caagcaaagg 21660
 caccttacta agagcaacac tcaattcgtc acgataaata ccaccaataa tcaactctg 21720

gccatgtccc acgcgagcga cagtatcaac gaccgtacga ctgatatgg ggattccgtc 21780
aatccctgaa ctattcgggt tttgggtccc atcctcaatg ttagattga gactgattc 21840
tgacttatct ccttgagtc gcaccctgg tgcatacgc agcatagtgc cgtaggtgat 21900
cccttcagt tcagccactt cttacctgt cacttgacg taataggtt catggtgatc 21960
aatcaccgt tgggcattt cttgtgttag cagggtcga cgtgaaaca cttgagccga 22020
accttcatt tcaagtaa tgactctgc taataggtag tcaagccgc gagcatcaat 22080
caaactacc aatgcaccgt ttgaagcgt gttacttga tccccggtg ttttattac 22140
cacctgatga ttgtgccag tacgaatgcc aactcgcag tccacaccta attcagtaag 22200
ttggtcggca tttatatga caatggataa cgccactca atacgagcgc taggtttatc 22260
aagcgcatag attaacgtt gatacattg catagctca ggagaatgc gactattat 22320
cgcattgagc gatgatccg ctcaacctt ggcttgagct gaagcccgg tagcggcctg 22380
cggtattctc tgattatcca ctgtacttg ttgattgtg gcatcgcta acacgcgtg 22440
aagtatcgt gcaacccag gagcagccac ttcgtatca cggtaatga tagttcgtc 22500
gctcgtgat gcatattga gagggaaaat ctcaatcgt aatgccctg tttttact 22560
gcgaattgc gtctgtgtt ccaatgcggc tgcgtctgt tcaaccaatt caagataacg 22620
aggaggacca gagacgtaa caaggcgtt gctagcatca gggcgccagc caaacgagg 22680
ctccatata ccagaacgtt gtaatgccag cttaactct gcggcctcac tttctgtaa 22740
acgaatgaga cgagacgcta cctactatt ttaaaaatg tagagcacat tgccatcata 22800
gtaccaaacc aaattgtaa gggaggcaat atgctgtagg aaatcctgag ggttatcatg 22860
ctcaaactgg ccggaaactt tgcattaat cttatcgtt actaccactg tagcatcata 22920
attagcgtg aaatcaatta ataatcgcg taaacttcc ccttcgcca cataaacata 22980
aggtataggc aaccaatcaa gttcttgcgc ccagctatg ttagaaagta acagtaacgt 23040
cccggtgagt acgcgctga aaaaagaat tagcggaaaa gccatattac ttaattccac 23100

cccacgcgag acgctacaga aaatggtgtt aactgaggaa ttaaattgtc tagcagagcc 23160
 agttgtttat ttattacttc ttgcaatccg tgagtatcaa gctctttag acgtaaacgc 23220
 gcctccagta ccaattgacc acaatcatcc aatactaaag ttgagggtta acgttttagcc 23280
 catgccaacg cttgttgcatt tagggagcga agcaatgtga cgtaacgtt atttccttca 23340
 cgtaacattg gtgcgtcaat aggagtgcgt aataccagtt ctgaacctg cggagccagc 23400
 atgacaagat gcttatctat agttaaaccg taaacacctt gtttatcggc aacaaacggt 23460
 tttcttcta aactggctgc caagttttt agtaaattt gcattattc tcggatggtt 23520
 atatataaac taagtaatcc tgcgccaat aaataaccta ctcatgtca tcgtgacata 23580
 aggtttcgcg gttcagctca aactccaga tattcaaaaa aatgttcattg ataattatca 23640
 accacctgta tagcaataga tgatattacg ttaatcgaac taatgagact tgctctattt 23700
 gatggaggtc gttcttgcg ccaccgcact taataacca gataagctat attgattatt 23760
 aaacaacata ttattgccat ccagcggcga aacaatactg ttctatgtt cgttgaaatt 23820
 tggtcatcc cattgaatct tcacaatcta atcccgatt ttactttata gtccaaaagt 23880
 gtcttttaa aaaaacacag ataattttag cctgtggtg ctattttagt aagacgggct 23940
 tggttggag tgcattccga gcgacgtcga taactttgag tgaaataaga ctgactcgag 24000
 aaccccgctt ccattggcaat atcaacaata ctcatcttac cattaagaag taattggtga 24060
 gcatagagaa tacgtcgctc gcttatccag gcgcgtggtg aaatgccata aactgtacca 24120
 aacagttctt tgaatgtggt taatcccatg ccgaattctc gcgcaaattt gcttagcttc 24180
 cacccttcta gataatttc ctccataaat tttgcaacc gttcttctgg gcggttgcct 24240
 aaatggcgca gagccgagag aaataaagtc ccttgcgagc taaaggcaag caaaagcagt 24300
 aattcctcaa tacgcagttg cgtaataact gacggaaaat cactccgttc caatatggca 24360
 catagatttt gaatggattg tgataatatt ggtgaaatat taaaaattaa caatggtttg 24420
 ggtgtggagt tgtctcgtcc aatttacta agcaaagaac caaagcgatg caaaaaagta 24480

ctcaaaaaac tgccgggtaa tggaatccaa agtaattggc agggttcttt tgtaccacat 24540
 cgaacagcat agctgccacg acgcaaaaac agcatattcc cctcatctaa atcatatgtc 24600
 tgaccgctgc tctgcatga aatctgacct tgcaaaagaa tatataggcc atcttgtgaa 24660
 tgctcaacaa ccttaaatat aggtgtgacc cattctaatt taataatctc tagtgatgcc 24720
 ataatgtta tactgtccta aaaatctaaa acttgtatat atttatctaa tgaggtgtat 24780
 tgagttatta tgcgtgcgat gtacaacat cgattaatgc aacaaaacc aatataataa 24840
 atcacctatc tggattagg taactggcaa ttggataac atgttttagg tatcatttgt 24900
 aaaacgactt tgttttacc agtaagcttt tgetgagcca ccgcctgaac tctcgtctc 24960
 ggaaaagaga ggggtgaccg taggtaaagt tcacctccc cgcgttgagc tggattcagt 25020
 ttatagaaa agaataaagg taggttacct gttcgaaat gagtgcgctg aacctctga 25080
 actttccct catacaacc aaacatacta acatcaatgt gtgctatgcg agataatggt 25140
 cgtgacatac gcacctccc cacaatacgc tgagctggca ttgggggggt agcgacccc 25200
 actaatagaa aagaaatgat gagtgtata atacgactca cgccagtccc tcccttgagt 25260
 tcacacaaag aagatagcta gatgatagca atccgagttc gcgcaatatg tggtgaaatt 25320
 tattattgta aaataacaac ccattcccaa ttatctaac ggggccacca cgaactcatt 25380
 taatttagct actgcaatat cacacctgc gcatataaag ccaaacatcc tttcttcat 25440
 aaaaaagga tgttggtta gaatcggaat cagcaaaaa acacatgtaa tagtaatgac 25500
 aatactgtat tatttgtatt caacaaaaa aagtcaagag attaatccta attagtgcta 25560
 gttatgttta attgtaaaat gcacaggaga aatacaatta ccatactgta tatatggttt 25620
 taaatcgcat catatattcc taatataagt gaacctcttg ttggtaacc atatgaata 25680
 aattacatat tccaatagc cgggtgtaat caccctattt tccgataaa aacatagact 25740
 agaaagtaga gaaaatagta tagaccaaca aaaatgtcat ctgtttaac catattccta 25800
 gttacattgc agcctattat aacattcgg aatgtgttt ctcgatatt tgcctttcta 25860

gccatcgtag cacttcagct gtggcctcta ttgctcagc cggaatatag tgatcgacga 25920
 gcgcatccca ataaagagca cgggctaag ggatacgttg taaaataggc accccttctt 25980
 cttctgctat ttgcgacaca gtctgaactt gggcatcggg atatttgaat gttaccaacg 26040
 gtagtggtgt ttcccctcgc ttgtaaagaa taccaatagc aatatgggtc ggattagcta 26100
 ccaccactga tgagcggtta acattttccc gcatgttctt cgattggatc tcttgatgaa 26160
 actgacgacg cttgcttttg atttctgggc taccctccat ttctttgtac tcgcgtttga 26220
 tctatcctt gctcatttta agttccttaa tatattgata gtattcaaag gcatagtcgg 26280
 ctatggagat gaccacaaag ccaacagtac agataacat caactgccgg agtatttgc 26340
 ccaataaagg ggtaatacat tcaattccac aggttggcaa ctgcaagagt gtgactagat 26400
 ttcccttaat gattatccag atgagtatac tgagcaaaac aaccttgaga atggattga 26460
 gaaactccac taaactttg atggaaaaga tacgcttggc accctctatt ggattgattt 26520
 ttttaatac cgggttaatt gcttcaccac ttataagaaa accatactgc acaacatgag 26580
 atgcgatgc cattaatgcc gccactgtta acaaaggaaa acagagataa aaaaactcga 26640
 gcaacacatt gtcaaccaca tagctaagcg cctgcgagaa aggaagatag ctctgctctg 26700
 cggggattag catcagctta ctaaatgct cgaaatagta gtcagaaagc cccattaaca 26760
 tcgcaactag cgcgacgata agcgcagtag agaccacttc ctacttttc gctacctgtc 26820
 cctttttgcg cgcacacagg attttctcg ggggtgggtg ctctgtctt tctccgtca 26880
 ttacttctcc aaaacaggga tcagtaaact tataggatcc ataaccaaca gcattgctt 26940
 actggcatga ctcatcatt gcatacagta gataaccaac aacaggcttg ctatcgcgt 27000
 tttatcggc atagccagca caaagacgtt taaagaaggc gcaaaacgac tgatgagtgc 27060
 aagtccaaat tcagctaaaa acatagcgat gagtaaagga gcagccaata cagcggcgat 27120
 taatagtatc tggctgaatt ggttataaaa gaaatcaacc cactgttcac taactgcagg 27180
 gaaaaagctg gccaccggcc aatttacata gctgtgaaag agggctgaaa gcaaagagag 27240

gaaagcccct ccgctgaaga aaattgttat taacgtttga gtcaaaagta aaccagtcgg 27300
 actagtttga ctatcaagtc caggattgag tagagatgcc atcgcggcac ctctttggtt 27360
 atctacaata aatcctgcgg attctaaggc ccagaaagga atggtggcca caaacccaat 27420
 caataacccc agtatgatct ctttgccgat aagcagcatc aacgtaaag catcaacctc 27480
 aatataaggt tggtagcgā cggcaggata gacataaaga gccaatgaac agacaatacc 27540
 attacgcagc aatactccac cgaggagctg ttacttaac actggcaata taacaaaaca 27600
 agccataaaa cgaggcaaca gcagggtata agtgagcaat ggtctttgga ttaatccgc 27660
 tatcatctta tgccttgat ctcatcatg gtcattctg caaaactgtg caattcatta 27720
 ccaagccacg aggcggtagc aaacagtgtg accaccacag cgatcaattt gataacgaag 27780
 cccagagttt gctcttgat ttgcgttaaa gcttgtaata aagataccaa agttcctacc 27840
 accgcagcca ctaacaccgg cggcattgaa aggactagca ccagccataa tgcctgactg 27900
 gtgaagtgaā ttatgtcacc ttactcatg tcacctccg tagctaatca ccagcccatg 27960
 cgtgagtcgt gtccagccat caagtaaaac aaatagcagc aatttaaatg gcagtgaat 28020
 agtcatgggg gaaacctca tcatcccat tgccaacaag atattggaaa taaccaggtc 28080
 aatgacgata aatggtaaat agatgagaaa gcctatctca aatgctcgag tcaactcact 28140
 caccgtaaac gcaggcaata aaatgaacag gctgtctgac tetaaccggt cagcactg 28200
 ctggggccat aactgtttag tgctgtcaac aaaaaagag tattctgcg cttgaatatg 28260
 ctgcttaagg aacatgcgat agggggcaag cccttcatca aagaatttct caacagattc 28320
 tatgttcgtg aggctaacct cattagcttg taaatagtct tgcgtcgca agccaacggg 28380
 tgccattaca taaagactaa ggatgattgc taagccatac attgcatgt tgggggggat 28440
 ttgctgtacc ccaagggcat tgcggagtag tgaaaagacc accgcaaatt tgacaaacga 28500
 tgtagccatt accgaaatca atggaagcag agtcagcaaa gataaaacga tgatgagatt 28560
 aatttcatcc ggtaactgga tcatgaaatc gtaacctctg tcaggcggtc aattegaacc 28620

ccgaggcgcc cttgcatctc gaccaatcga ccatgtccaa gcaaccggcc gtagccagc 28680
 aagcgcaatt caccatcaac aggtgttgta agatcaataa gagaaccggc ctccaggcta 28740
 gtgagtgtgt gccaatctaa gatttgccgc cccactcaa agctaactg aaccggaagt 28800
 tggttcaaat cggatcaatgg ttcgggggta agttcgtcag attcatgact cataccgata 28860
 aactccaatt tatttgattg taattgaaag tagccccaag ggttctcacc aacataggcg 28920
 agtactggcg aattaggccc actccctca ggggccaaca acacatcacc taatcgaagg 28980
 gaatcaacct catctagagt caggtatact ttatgccaac gcaaagaaat aaggataggc 29040
 aaaggatatgc gtcagaatt gggtcgtgcg ggtaacagag cgaacagagc ctgagctgag 29100
 gtagccaga aggagatatg cgcattatct cgggacagcc gcaaactcaa cagaggttgc 29160
 gtgacagaaa gagacgctgt cgctatatca ttacagacca gttcggcag gaaaactgtc 29220
 tggcgttcca acagcgcaag ttgcaactct ttcggcagag taaagaatgg agcccctagt 29280
 aagtcggcgg ttaaccagtt agccagatca ttgcaaaaac agtagagcgt gaagtgcgtt 29340
 ccttccatt gtaactgtaa tatacagttc aaagacgaag gaggtcaga gacggtaagt 29400
 tcgagtttc cctcttcca caagtagttt tgttgataat ggctgagccg ttgacgtagc 29460
 gacagttcac ttaattggc ctgtggcaag gtaacaaac tcattctca gcctccact 29520
 cctcatagac gtggcgtttc tgacgtgact cctgttact gtcacgcta gcttgaaaat 29580
 caagttgtgt tggctcaatg cgttgtaac gctcaagaag atcataact cctgcgcta 29640
 aaattctaa agcttccga ctggcgatca gttctacatg cagttttccc ggaatctcag 29700
 caatacgaac cataatagcc cccaattcag gtaagttaag gtgtaattgg gttactggg 29760
 atgagccgcc gcgcagttct agttctaccg ctatcgctg tgctaactgt ataagttgct 29820
 ctgagactga tgccagcctg gtcgcgcgca ttgttgctaa taggtgatca cccggcgtga 29880
 caaccggtgc tgtaaaagac aaggaatata tctccggcaa ggtttctcg cgcggaagta 29940
 acagttttc tggtcgcggt ggttcgatgg tatctttgct gctatcaacg ccatcagtaa 30000

gatgttggga cccatccgcc agctcggta tctccagttg ctctgactgc actgtcgctt 30060
 tctacggaaa acgagcagat tttctgcta cctcagtcac aggagtagca caccatcttg 30120
 ctaccaaag atcatccggt gtggcactaa ctgccggggg acatatctct ggcaatgctt 30180
 ttgatgaag agctaaccgt tcttctgcaa ggcgttttg cctgctatcg cgctggtttt 30240
 ttgtatact ggccggagtt tccctaccga cagaccatac aataacctct gcgccgtcag 30300
 cagccggatt caatggctga acagtcggct tgctattcaa ttgaactggt tgagcggaat 30360
 ccataggcga ttgtgaaca aataactcat catgtccaga cggctcgag ggggattcac 30420
 ttgatgtccc cgtttcacaa gtcacccct ctaaaaagg cgccaatggc atgagagcat 30480
 taataatact ctctacgagg tcatcaaac ggctatcctg ctggtataag tgcgctctat 30540
 tggtagcacc ttgggcaagc ggagataagt tgaatcatg attattctga tggttgtgtt 30600
 gaggttttaa tctacctct ttcttcagg gttgagacgt cgcgctaag ggcgcatgcg 30660
 cagcaagcc atctccttc tgaccttctt tttgccaag gtcatgcgga cgtacaggtt 30720
 taagcgactc ttcttggga tgacaattcc cctattatt atgcaacagc gcttgctcaa 30780
 aatcgacaca tgcttgcaaa gcatgatgcg gcttcccag aggttgatac tcaggttcta 30840
 atggggaacg agtgggtgatt ttattcatta ggcgttctg tgatgctgta gaaactcttc 30900
 ttgttctgt tcttctgat aatgtgttg atttagctca tctcatctt ctgctgcac 30960
 tagctcgaga aactatttt ccttatgacg agcctgtgc agcatcttt ggcataacgt 31020
 aaggcgctca cgctcattgg ctaaacttc caataattg gcgcactcca gttcataatt 31080
 ggctccttt tcacgtagcg acgtatttg tcgtgccat ttctccaaat cttacaatt 31140
 cagtgtggtg tttttcgct gatcaaatag acgttgctcc tcatcaatac gccacaaatg 31200
 gtaactctga ctggttgca ccgcctcttg atgacgtcga tgagctgcct gcaagcaagc 31260
 ttgctgagtc ttgatggctt tctccgacg ttcaacgcgt aaaactttaa cccggtgcag 31320
 gcggcgatc attgggtcag cgtctccat aagttcagcg tctcattgaa atggcttaac 31380

tcgtgcgtcc cctggcagag ccatacctcga atcgccccc tgcttcaat cgcttgatcg 31440
 gcctctttgt ctggcccttt ctggactcc cggatttga acagcaattc cacttctca 31500
 tattggcca ataaacggcg taagtcccc gccaggttt tgtgctcctt gctgacaatt 31560
 tgattcatca cctgctcgc tgaacgtaat acgtcaatgg caggataatg attagctgcc 31620
 gctaatttc gtgacagaat aatatgacca tcaagtatcg aacgtgttc gtcggccacg 31680
 ggctcggta tatcgtcccc ttcgaccagt acggtataga gagccgtaat tgacccttg 31740
 ctggactgac cagcccttc catcaaacgg ggtaaagcgg caaatactga cggaggataa 31800
 ccgcggcgag tcggtggttc tccgcagct aagcctattt cacgtgagc acgagcaaac 31860
 cgtgttacag agtcataag taacaatacg cgtttccctt gatcgcgaaa atattcagca 31920
 atagatgtcg ccacgaatcc agctttggct cttccattg agggccgac cgaggtggcc 31980
 accacgagaa ccgctttgcg taaccctct tcgcctaat cagactcaat aaactcacgc 32040
 acttcgcgc cagctcacc aataagcgc agcacggta cgtctacttc agcactacga 32100
 ataagcgaag caagcagtgt actttcccc ccccggcgg ccgcgaagat gccattctt 32160
 tgcccctcgc cacaggttaag caaacgtca ataaccgga tccccaaaga aagtgggtg 32220
 gtaataagt ttcggctcat cggcgtggg gcacctgat aaactgggta ccaagccgc 32280
 ggttcaggga gatgcccc atcgaaagc tgcctaaac catccaacac ctgtccagc 32340
 agatgttac ccacccaac ctgatgcatt gtcctgtcg ggctaacttc agtattagaa 32400
 gatacccg acatttcacc aagtgaata agtaatgctt gatgttggc aaaacctatg 32460
 acttcagcct gtaaagacag gctgtgtca gggttacgta agtaacataa ctcaccgatg 32520
 cgcacacctg gcactaccgc tttaataac gtctctgtca ctgagtgac acgtctctta 32580
 atttgatta ggcggctacc tacaatgcca tgacgaatat gatgaggtat ctgatctagt 32640
 gagagcataa atccataatg gttgaaatat taaccactat tttagtgact aaaaacgcta 32700
 aaaaattgta gcgggagccg cgagtttta gaaaatagc caagcagcac taaaattct 32760

cggctgattt tggcatcgat aagcaagaac tattttata atcgcggtaa ttgtaattat 32820
 aaactgttca tctcaggag tagttatgac gacgcttcat aacctatctt atggcaatac 32880
 cccgctgcat aatgagcgtc cagagattgc cagtagtcag atcgtaaatac agactctggg 32940
 tcaatttcgg ggagaatctg tgcagatagt cagcggcact ctgcagtcta tagctgatat 33000
 ggcagaagag gtaacatttg tcttctccga gcgtaaggag ctctccctcg acaaacgcaa 33060
 attaagtac agccaggctc gagttagcga cgttgaggag caggttaatac aataccttag 33120
 caaagttcca gagttggaac aaaaacagaa tgtgagtgag ctgctcagtc tgttgagtaa 33180
 cagccccaat ataagcttgt cccagttaaa ggcttatctg gaggggaaat cagaagaacc 33240
 gagtgagcaa ttcaaatgc tctgcggctt gcgtgatgcc ctgaaagggc gccctgaatt 33300
 agcacatctt tcgcatttgg ttgaacaagc tctggtcagc atggctgaag agcaaggaga 33360
 aaccattgta ttgggtgcca ggataacccc ggaagcgtac agagaatccc agtcgggtgt 33420
 taatccactg cagccgctcc gtgataccta ccgcatgca gtgatgggtt atcaaggaat 33480
 ttatgcgac tggagtgatt tacaaaaacg tttcctaatac ggggatatac actcgggtgat 33540
 attattcctg caaaaggcgc ttagtgcaga tctacaaagt caacaaagcg ggtctggacg 33600
 ggaaaaatta ggaatagtta ttagtgactt acagaagcta aaggagtttg gtagcgtgag 33660
 tgaccaagtt aaaggatttt ggcaattttt ttacagagggt aaaactaatg gcgtacgacc 33720
 tttctgagtt tatgggagat attgtcgac tggttgacaa gcgctgggcg gggattcatg 33780
 acattgaaca tcttgccaac gccttttccc ttctacgcc tgaaatcaaa gtgcgtttct 33840
 atcaagattt aaaaagaatg tttcgtcttt tccctctggg ggtatttagc gatgaggagc 33900
 aacggcaaaa ttattgcaa atgtgtcaaa atgcgatcga tatggctatt gagagtgaag 33960
 aggaagaatt gagtgagttg gattgaaccc atcatttccc atttctgcca ggatctggga 34020
 gtgccaacat ctageccctt ttcgcctctt attcaattag agatggctca atctggcacg 34080
 ctgcaactgg aacaacatgg tgcgacactg acattgtggt tagcgcgttc tcttgctggt 34140

caccggtgcg aagatgctat ggtcaaagcg ctaacgtca cggcggccca aaagagtggc 34200
gctttaccgc tgcgagcggg gtggttaggg gaaagtcage tgggtgtatt tgtctcgctt 34260
gatgagcggt ccttaacctt gccccttta catcaagctt tcgaacagtt actgcgattg 34320
cagcaagagg tgcttgccc gtgagtcgca taataactgc ccccatatt ggcatcgaaa 34380
aactgtcggc gattagcctg gaagagctat cctgtggctt gcctgaacgt tatgccttgc 34440
cgctgatgg gcattcagtc gaaccacatt tagagcgcct ttacctaca gcacaaagca 34500
agcgtagcct atgggacttt gcttctccg gctatacatt tcatggatta catcgagctc 34560
aagattatcg gcgcgaactg gataccttgc agtactgct aaccaccagt cagtcctcag 34620
agctacaagc tgccgcgcg ctgcttaaat gccacaaga tgatgatcgg ttactgcaa 34680
taatccttaa cctgttcac aaagtatgaa tattacttta accaaacgac aacaggagtt 34740
cttgctgctc aacggttggg tacaactaca atgtggccat gcagagcgcg catgtattct 34800
attggacgcc ttgctgacgt taaatcctga gcatttagcc ggtcggcggt gccgattagt 34860
cgcgctactt aataataacc agggagaacg tgccgaaaaa gaagcgcaat ggctaatac 34920
acatgacctt ttacaggctg ggaattggct ctgtttgagc cgcgccaac aactgaacgg 34980
cgatcttgat aaggctgcc atgcttatca acattattg gaggtaag atcataatga 35040
atcccatga tcttgagtgg ctaaactgta ttggcgagcg taaagatac atgtggcag 35100
tgctgctgtt agctgtgga tcatgatgg tcttaccact cccccctt gtgttgaca 35160
ttctgattgc tgtaacatg accatttcag tgggtgtgtt aatgatagcg atctatatca 35220
actctcttt acaatttca gcttccctg cgggtgctact cgttaccag ttattcgtc 35280
tcgcacttc agttagcacc acccgcatga tctgctaca agctgatgcg gggcagattg 35340
ttacacctt tgtaatttc gtcgttgcg gtaacctcat cgtcgggatt gtcattcc 35400
tgatcatcac tattgtgcaa ttttagtga taacgaaagg ctgagaacgt gtagcagaag 35460
ttagtgccag attctctctt gatgcgatgc cgggtaaca gatgagtac gatggcgata 35520

tgcgagccgg ggtgatcgat gtcaatgaag cgcgtgagcg acgcgcgacg atagaaaaag 35580
aaagccaaat gttcggttct atggacggcg ccatgaagtt cgtcaaaggg gatgcaatag 35640
ccggcctcat tattatcttt gtcaatatat taggcggcgt caccattggt gttacccaaa 35700
aaggattagc ggccgctgag gcactgcaac tctattccat cctcactgtc ggggatggga 35760
tggtttctca ggtacctgcc ctgctgatag ctattaccgc ggggtattatc gtcacccgcg 35820
tctcttcaga agattcatca gatctgggta gcgatattgg caaacagggt gtcgctcagc 35880
ctaaagccat gctaattggt ggcgactgc tgttgcctt tggcttctc cccggcttcc 35940
caacagtcac ctttctgatt ttggcgctat tggtaggctg tggtaggtat atgctcagcc 36000
gtaagcagag tcgtaatgac gaggctaac aagacctgca atccatactg acgagcggtt 36060
ctggcgcccc ggctgctcga accaaagcca aaacaagtgg ggcaaacaag ggccgactag 36120
gggaacaaga agcatttgc atgacgggtc ccttgctgat tgatgtagat tcaagccaac 36180
aggaagcact ggaagcgata gcactaaatg atgagctggt tcgagtgcgc cgtgctcttt 36240
atcttgatct tggcgtaact ttccctggga tccatctgcg tttaatatg gggatgggtg 36300
aaggcgaata tattatttcc ttgcaagaag ttccagtggc gcgaggtgag ctttaaggcag 36360
gttatttact cgtgcgtgaa tccgtcagcc aactcgaatt actgggtata ccctatgaaa 36420
aaggggaaca ttgctaccc gatcaggaag ctttctgggt atcggttgaa tatgaggagc 36480
gcctggaaaa gtctcaactg gaattttct ctattccca agttctaacc tggcatcttt 36540
ctcatgtcct acgtgaatat gccgaagatt tcattggtat ccaagaaacc cgctatctgc 36600
tcgaacagat ggaaggaggc tatggcgaat taattaaaga agtacaaga atcgttccct 36660
tacaacgaat gaccgaaata ttacaacgat tagttggaga agatatttct atccgtaata 36720
tgcgatctat tcttgaagct atggtggaat ggggacaaaa agagaaagac gtcgttcaac 36780
tcacagaata tatccgcagt agtctaaaac gttatatctg ctacaaatac gctaattgca 36840
acaatatatt gccggcttat ctttctgac aagaagtaga agaaaaaatt cgtagcgggtg 36900

tgcgccaaac cagtcgaggg agttatttgg cattggagcc tgctgttacc gagagtttac 36960
 ttgaacaagt tcgcaagact attggcgatc tatcgcaaat ccagagtaaa ccggtgctga 37020
 ttgtttctat ggatattcgt cgctatgtgc gcaaactgat tgagagcgaa tactatggct 37080
 tgccgggtact ttcatacca gagctgactc agcagattaa tatccaacca cttggacgaa 37140
 tttgcttatg atggcagatc cttaattcc gtggcttacc gaacatggct tggtttgcca 37200
 ccctcactat ttgtctggca ccccatctt ttaggttcg gcctttcaat tagctggcct 37260
 caagcttgcc tggcgcgtag aaattgaaca aaggcgggtt tggatcgtgc ttatccaacg 37320
 agtggaaaca cgtcgagggc tgaaaaatcc cttcgcgga ctttatatgt tagctaagc 37380
 agcgcgggcc gttcttgcc ctgactatta tctgtatggc aatgtcgatg tactggcggg 37440
 gagttctctc agtacgcaac ggctcgtca ttttatcgg cgttggaccg gggccaaaga 37500
 attaagcacc ggggtggtct cactaaaagt atcacaagtc atcaccttat ctaatatgaa 37560
 aaagcgacaa aacaacggct ttgcctgaca agctaaataa aaataacgta atagaatagg 37620
 aggtagatta tgaagtcttc ccattttgat gaatatgaca aaacgctta acaggcagaa 37680
 ctggcaatag ccgacagcga tcaccgcgca aaattattgc aagaaatgtg tgctgatatc 37740
 ggcttaacgc ctgaagccgt aatgaagata ttgcggggcc gttccgccga agagataaag 37800
 ccagcggagc gcgagttgct tgatgaaatt aagcgtcaga gggagaggca gcctcaacat 37860
 ccctacgatg ggaagagacc aagaaaacca acgatgatgc gagggcaaat tatttaatat 37920
 gattagagcc tacgaacaaa acccacaaca tttattgag gatctagaaa aagttagggt 37980
 ggaacaactt actggtcatg gttcttcagt tttagaagaa ttggttcagt tagtcaaaga 38040
 taaaaatata gatatttcca taaatatga tcccagaaaa gattcggagg ttttgccaa 38100
 tagagtaatt actgatgata tcgaattgct caagaaaatc ctagcttatt ttctaccga 38160
 ggatgccatt cttaaaggcg gtcattatga caaccaactg caaatggca tcaagcgagt 38220
 aaaagagttc ctgaaatcat cgccgaatac acaatgggaa ttgcgggcgt tcatggcagt 38280

aatgcatttc tctttaaccg ccgacgtat cgatgatgat attttgaaag tgattgttga 38340
ttcaatgaat catcatgggtg atgcccgtag caagttgcgt gaagaattag ctgagcttac 38400
cgccgaatta aagatttatt cagttattca agccgaaatt aataagcatc tgtctagtag 38460
tggcaccata aatatccatg ataaatccat taatctcatg gataaaaatt tatatggtta 38520
tacagatgaa gagattttta aagccagcgc agagtacaaa attctcgaga aaatgcctca 38580
aaccaccatt caggtggatg ggagcgagaa aaaaatagtc tgataaagg actttcttgg 38640
aagtgagaat aaaagaaccg gggcgttggg taatctgaaa aactcactact cttataataa 38700
agataataat gaattatctc actttgccac cacctgctcg gataagtcca ggccgctcaa 38760
cgacttggtt agccaaaaaa caactcagct gtctgatatt acatcacgtt ttaattcagc 38820
tattgaagca ctgaaccgtt tcattcagaa atatgattca gtgatgcaac gtctgctaga 38880
tgacacgtct ggtaaatgac acgaggtaat tatgcaacaa gagacgacag aactcaaga 38940
ataccagctg gcaatggaat ccttcctaaa aggaggggga actatcgcca tgctcaacga 39000
aatttcaagt gacactttag agcaactcta ctctcttgca tttaaccaat accagtcagg 39060
aaaatacgag gatgctcaca aggtctttca agtctctgt gtgctagacc actatgattc 39120
acgtttcttt ttagggctag gcgcttgctg tcaagccatg gggcaatacg acttagcgat 39180
tcatagctac agctatggcg ccataatgga tataaaagaa cctcgtttc cgtttcatgc 39240
ggccgaatgt ttactgcaaa agggagagct tgctgaagca gaaagtggct tgttcttggc 39300
tcaagagctt atcgagaca aaactgagtt taaggagctt tccaccgag ttagtcaat 39360
gttagaagca attaaattga aaaaggagat ggaacatgag tgcgttgata acccatgacc 39420
gctcaacgcc agtaactgga agtctacttc cctacgtcga gacaccagcg cccgcccccc 39480
ttcagacca acaagtcgcg ggagaactga aggataaaaa tggcgggggtg agttctcagg 39540
gcgtacagct ccctgcacca ctgacagtgg ttgccagcca agttactgaa ggacaacagc 39600
aagaagtcac taaattattg gagtcggtca cccgcggcgc ggcaggatct caactgatat 39660

caaattatgt ttcagtgccta acgaagtta cgcttgcttc acctgataca ttgagattg 39720
 agttaggtaa gctagtttct aattagaag aagtagcaa agacataaaa atcgctgata 39780
 ttcagcgtct tcatgaacaa aacatgaaga aaattgaaga gaatcaagag aaaatcaaag 39840
 aaacagaaga gaatgccaag caagtcaaga aatccggcat cgcatcaaag attttggct 39900
 ggctcagcgc catagcctca gtgattgtcg gtgccatcat ggtggcctca ggggtaggag 39960
 ccgttgccgg tgcaatgatg gttgcctcag gcgtaattgg gatggcgaat atggcagtga 40020
 aacaagcggc ggaagatggc ctgatatccc aagaggcaat gaaaatatta gggccgatac 40080
 tcaactgcgat tgaagtcgca ttgactgtag tttaaccgt aatgacctt ggcggttcgg 40140
 cactaaaatg cctggctaatt attggcgcaa aactcgggtc taacaccgca agtcttgtgg 40200
 ctaaaggagc cgagtttctg gccaaagtg cccaaattc gacaggcata tcaaacactg 40260
 tcgggagtgc agtgactaaa ttagggggca gtttctgtgg ttaacaatg agccatgcaa 40320
 tccgtacagg atcacaggca acacaagtcg ccgttggtgt gggcagcgga ataactcaga 40380
 ccatcaataa taaaagcaa gctgatttac aacataataa cgctgatttg gcctgaaca 40440
 aggagacat ggcagcggtt caaagtatta ttgaccgact caaagaagag ttatccatt 40500
 tgcagagtc acatcaacaa gtgatggaac tgattttcca gatgattaat gcaaagggtg 40560
 acatgctgca taatttggcc ggcagacccc atactgttta agtttaagga ggaataacca 40620
 tgacaataaa tatcaagaca gacagcccaa ttatcacgac cggttcacag ctgatgcca 40680
 tcactacaga gacagtcaag caaagcgggt agattaaaaa aacagaagac acccgatg 40740
 aagcacaagc aataaagagt agcgaggcaa gcttatctcg gtcacagggt ccagaattga 40800
 tcaaaccgag ccagggaatc aatgttgcatt tactgagtaa aagccagggt gatcttaatg 40860
 gtactttaag tatctgttg ttgctgttg aactggcacg taaagcgca gaaatgggtt 40920
 tgcaacaaag ggatatagaa aataaagcta ctattactgc ccaaaggag caggtagcgg 40980
 agatggctcag cggtgcaaaa ctgatgatcg ccatggcggg ggtgtctggc atcatggctg 41040

ctacttctac ggttgctagt gcttttcta tagcgaaaga ggtgaaaata gttaaacagg 41100
 aacaaattct aaacagtaat attgctggcc gcgaacaact tattgataca aaaatgcagc 41160
 aaatgagtaa cattggtgat aaagcggtaa gcagagagga tatcgggaga atatggaaac 41220
 cagagcaggt agcggatcaa aataagctgg cattattgga taaagaattc agaatgaccg 41280
 actcaaaagc caatgcgttt aatgccgcaa cgcagccgtt aggacaaatg gcaaacagtg 41340
 cgattcaagt tcataaggg tattctcaag ccgaggtcaa agagaaagaa gtcaatgcaa 41400
 gtattgctgc caacgagaag caaaaagccg aagaggcgat gaactataat gataacttta 41460
 tgaaagatgt cctgcgcttg attgaacaat atgttagcag tcatactcac gccatgaaag 41520
 ccgcttttgg tgttgtctga ccattgatga ccttggttag ttaattaacc gaaagtttta 41580
 ttttacctta ccccttatgg tgatagagct tatctatata aggtataagg tgctgaaaag 41640
 ccctgtatta acattagtta atccagggtt gtgattatta aattaaat aataagttag 41700
 gatcatatga caattaaat aaaagattat ttacatgtag tagtcaaga cctgagctga 41760
 cagttaccgg ttgtgaacg gcaatacgcg gtcattgagc acgtcagcgg ctgtgatcgg 41820
 catttgctc gtatacagcg agagtgttag aaatgctgtg tcattccagt aatatgcaat 41880
 caaaaaagaa tgacacatat cccaataatg agagtcggtg attttactca ttgatggggg 41940
 ggaataatta ggctaaaaca acctcaatgt taaagagccg aggtgttcgg taagctctgc 42000
 atttaacgct gtttcgacgg taagctttgt tagcatacga gaaatgcat taaggtcggc 42060
 ttcggttta agaccttag ccagttcagc cgcaagtgt ttaagtttct tttcgtccat 42120
 aattgcctg tctccgttgt tggagtgaag atatcaaaa caggcaatta cacaatttg 42180
 ttacagtct cgattcataa aggtagatcc ttccgcact caatattcag gttcgtcacg 42240
 gcgtaaccaa atatcaaatt gaccttatt cagtcgttgc aatgtttcaa atccctgaag 42300
 cggtgaccag gcacggttg gccgttgaa atccccggcc gcgtttacca atttttgat 42360
 gggggcatgg tcagactcga tacgattatt caggtatttg acttgccgct gctttgcagc 42420

atcccgatc tttccttct ttcacaaac gaggatagc gtaaccgat gacgaatgtt 42480
 tatcgggtatt gaggatttta ggctgtcttt caacagaata gggttttaac acccgttta 42540
 tgaatggata ggcgggtattt ttatttcgtt taggcgaaaa ataaaaatct aatgtagtgc 42600
 cgtgcttatt gatggcgcgga tagagataaa accattttcc gttgacctg atatagattt 42660
 catcgagttg ccatgaggag tcggcatccg taaattgata tcgtttcaat ttctgacgag 42720
 gtataggtgc atattcaata aactaacggt aatggtaga gcgataaacg gaaatccac 42780
 gctctgacag catatcgctg acattggcat aactcatcg gggcaaatg ttcccactg 42840
 aatcacctg gggccatgtg gattcactga agaagggatg aatagcctca gtttcatga 42900
 caactccatt tttgcaaca agcccaaata tagttagtct gaagtggcac aaacgctgga 42960
 taccgcgcaa aagcacacc tgacgggttc aaaaggggta ctggatcgg ccaaacagta 43020
 tactaacacc gtcagcagta atacattgga cagtccaat acctatacca ataataaagc 43080
 agactaacat tgaaggatgc taataattat actgttcaga aggtaaacag agatgctata 43140
 agtgggttta tagatcagga attatattga gaaaccattg aagaaactaa agagcaaatg 43200
 gccggtattg aaactactgc cccaaaatac actgatttaa agtttaatga tattccggt 43260
 aaggttgact ctgcggccat acaactctc tgacatattt ctctgggta ttatgcata 43320
 aaaatggcca aaaacttca atggtagaag agctaaatc ggataaataa cgcataaaaa 43380
 ttcccgcgga aaaactatat acatatataa attaatatg tatgttttg ttgcagtga 43440
 aaaactcgat aataaaaata tttcagaaa ggcattcaat atgttcataa atccaagaaa 43500
 tgtatctaact actttttgc aagaaccatt acgtcattct tctaattaa ctgagatgcc 43560
 ggttgaggca gaaatgtta aatctaagac tgaatattat aatgcatggt cggaatggga 43620
 acgaaatgcc cctccgggga atggtagaaga gagggaaatg gcggtttcaa ggttacgaga 43680
 ttgcctggac cgacaagccc atgagctaga actaaataat ctggggctga gttctttgcc 43740
 ggaattacct ccgcatttag agagttagt ggcgtcatgt aattctctta cagaattacc 43800

ggaattaccg cagagcctga aatcacttct agttgataat aacaatctga aggcattatc 43860
 cgatttacca cctttactgg aatatttagg tgtctctaata aatcagctgg aaaaattgcc 43920
 agagttgcaa aactcgtcct tcttgaaaat tattgatgtt gataacaatt cactgaaaaa 43980
 actacctgat ttacctcctt cactggagtt tattgctgct ggtaataatc agctggaaga 44040
 attgccagag ttgcaaaact tgccttctt gactgcgatt tatgctgata acaattcact 44100
 gaaaaaacta cctgatttac ctctttcact ggaatctatt gttgctgta ataatttct 44160
 ggaagaattg ccagagttgc aaaacttgc cttcttgact acgatttatg ctgataacaa 44220
 ttactgaaa acattaccg atttaccctt tccctggaa gcacttaatg tcagagataa 44280
 ttatttaact gatctgccag aattaccgca gagtttaacc ttcttagatg ttctgaaaa 44340
 tatttttct ggattatcgg aattgccacc aaactgtat tatctaatg catccagcaa 44400
 tgaaataaga tccttatgag atttaccctt ttcactggaa gaacttaatg tcagtaataa 44460
 taagttgatc gaactgccag cgttacctcc acgcttagaa cgtttaatcg cttcatttaa 44520
 tcattctgct gaagtacctg aattgccgca aaacctgaaa cagctccacg tagagtacaa 44580
 ccctctgaga gagtttcccg atatactga gtcagtggaa gatcttcgga tgaactctga 44640
 acgtgtagtt gatccatag aattgctca tgagactaca gacaaactg aagatgatgt 44700
 attgagtag tacgcaagag cggtcataat tctgcgtcac gtaaaatat cattacaacg 44760
 taatcacttt atcgaggcga cttcaaaat aaatcgccaa ctgtgacaat gccaaattcc 44820
 agctctggat tggcattgtc catctttctt gcgcattcat taatccaga tacagtgatt 44880
 tcaacagact gtttcatta gggaaaatgc ctttcgttt tgcagcttt ctgaacagcc 44940
 gatgtaccga ttcaatggca ttgtcatgt aaatgacctt gcggatcgtt gtcggatacc 45000
 ggaagtaaca cgacaaattg gccattttt tccgccacga ctggagtacc actggatatt 45060
 gttggcccca ttaccagttg aggetcaaaa gtccattgc gatcacgggg cgtggcgagt 45120
 tcaaacgtac cagtgggagt ttgaccgtt ttctggacg aaccattttt gcggttggt 45180

tcgatgtcca gagccagatg agtctgacca tgcccccatc aaaaaattgg taaacgcggc 45240
 cggggatttc aaacggccaa accgtgcctg gtcaacgctt cagggatttg aaacattgcg 45300
 acgactgaat aaaggtaat ttgatattg gttacgccgt gacgaacctg aatategagt 45360
 gcgggaagga tctaccttta tgaatcggct cttaacatt gaggttggtt tagcctaatt 45420
 attccccccc atcaatgagt aaaataccga ctctcattat ttgcagcaaa cctatatatt 45480
 gcgctgaatc atagatcacc catcataact ggggataaaa cacttaata tgttgtaacc 45540
 ccacggtttc atatgagtat tctccgatta catatatgtt agttgccatg gataatccgt 45600
 aatgttaaata agagttattt tctgtgtcac aatcataaat aacacaattg ttcttcaga 45660
 actcaacatt ttaataact gtagcaatgg tatcaatagt catacttatt aaaatgatat 45720
 ttctctaca gtttaattaca cagcgtgaag taatgatatg gtgtttattt tgttattaaa 45780
 tgtcgtatct tgttaatgg tttatttat gtgtttaact gatttcaatg taaaaatat 45840
 ttttacatt tagtaagtca tgtaatgat atttgataaa gataattact gcttaattga 45900
 tggatatttt ttgtttttt aatcaacggt ggcgtcgcta tcgtctaac gttcacagaa 45960
 gatatcattc tgcatagctc cgccagcatc caggcaagca tctactgtca gaaagtgtc 46020
 aacttcata ccagcataaa aagcagcgca caatgcggtg gctatcacta gtcgttttt 46080
 cattgcatag tcctcgtagg ttagattatg ccccatgagc tgagaagagt gagctatcgt 46140
 tgtcttgagc ttctgtccg gggtatcatc gaattttact ttatttacct agaatttata 46200
 ttctatcata ccataattaa actttacttg aataaaaaaca tcggtgtgct gaccatattc 46260
 ctgatatgaa tataataata tagccttaat gctcatggta ataaagtgcc ctacagcaat 46320
 ttggcggggt ttgctgcaaa taatgagagt cgtgatttta ctattgatg gggggggaat 46380
 aattaggcta aaacaacctc aatgttaaag agccgattca taaaggtaga tccttcccg 46440
 actcgatatt taggttcgtc acggcgtaac caaatatcaa attgacctt attcagtcgt 46500
 cgcaatgttt aaaatccctg aagcgttgac caggcacggt ttggccgttt gaaatccccg 46560

gccgcgttta ccaattttt gatgggggca tggtcagact caatacgatt attcaggtat 46620
 ttgacttgcc gctgctttgc agcatcccg atcttttct tcttcagtt tcatgacaa 46680
 ctccatttt tgcaacaagc ccatagtggg gacaatgaac attaacgccg atcatgagaa 46740
 aaacttaaaa gtgagcatta tatataaaat tcaactaatt ggaggaatca ccgaaatact 46800
 taatggggg gttattaact gggggatatt taacttgga ggatattca aatcgtctat 46860
 atcactaata aaaataataa ttattgataa cactaattg gtcagtgtat atgtaaaaat 46920
 ttggataaat aatgaaaact tcttaattta tagtgaatta aaaacaaatg agttattata 46980
 taaaccatat ctattaaatt taatagatat tattgtaact atgtagtgaa ataactttgt 47040
 atgggtaccgc gtatatgatt gttacattt cagatgaata atatgggtga tgtcgagttg 47100
 ggctgaaaact tagtattttg cggttctttt ctctgtcaa tatcatcaat gaaacgttct 47160
 aaccaagcct gcatttcac gatatccaac cctaccagtg attgttgaga ccagagaata 47220
 gggttaccgt ccagtcttcc ttgaacatgg gcaggccaat gtgcgcaaa caaattatcg 47280
 ttggttgga aatcagcacc tagctcactg aacaactgta ccattgttg atgataacaa 47340
 gcaatcagta ctgggatgtg cccatccact tcaaatgtaa atgtataaac gtcattttca 47400
 ttaactgat ggtcaagcc aagcttcagg aaaagctgtt gcataagttc tgtgaagggt 47460
 gtctgcatta aacctcctg gagtcaaag ttaacactct aaaacgtgc cccaccccca 47520
 gaggataatg atacatagaa ttacccaga atgagttagt aaaccattg cggaactttt 47580
 ccttatcaga aaagtggaat tcaccgaaat tgggatcgaa gaaagtaaca ccactctttt 47640
 cgttgacata cgccgctatg gcgtgggctg acattggcc tgagagatgt attttttat 47700
 aaccgtaacc tatcccatga gtatcaagga tagcgtttta taattgatcc agcccttctg 47760
 attcgtcgt accagtaaca tcaactggac gcagtaagca atgccgttca atcatagtt 47820
 ctgatatgcc attttcttg aaccaatcta gtgttacctc atcttgatca acgtctgctt 47880
 tacaaccatc tatttgcaac tgtttaattg agtaaagtgt atcgatctgg aatttccct 47940

tacgcccc gcc aacatagagc tggtaaata agctttggcc ttgtgcatgg ctctgatcc 48000
 aatgtgcaca taaagcctca cagacaccgc tagcagtgtc tgaatgtttt attattttat 48060
 gaagaaaagc ccctttggtc tgagcaaact tgaaattgat gttacctccg taatttgcaa 48120
 cagactctct caccgcgggc acacgagtgc tgagtacaaa atgtatcatg cgatacataa 48180
 tcatactgaa ggtaaagctg ctgcgttggc tagctttgcc gtcgctggc aactttctat 48240
 ccagcataga acggcctgac tggttatgtt ttatggtggc tgataacttt ttctgcaggt 48300
 ttgagtgtga cagtgtgtt tccacttca ctggtgtgc gccaatcacc cttcgggtga 48360
 gggtagctga ttgaagggtt tcaccggcag aataattcga tagttgaata tggtagtgc 48420
 cgtaatact gtcatctgt ataacctatt tatgttagcc attattttgc tataccgata 48480
 aattgaatat atctggattt tgacgtctgg caatgaacga tagagcctac aataaattat 48540
 aaccaatagg tgactcaggg attttctctg aatcagagta catgtgttac attcgattaa 48600
 atatttttc aatagttaaa agttactttt tattataaaa attcaactta tggggacagt 48660
 gatgttatgt tgatagcgtc ggggcgtcgc ggggagagtt tataataaac tctaattgta 48720
 taaaaatcca ttctaataat gatatattat actatatctg tagctttaa ataaataatt 48780
 atagagtgga ggatgctga aatatttca tgcatgggaa gctcattgag agtagatatt 48840
 ctattttat aaattacgga gtgattttaa ttatacactc gtagtgacgg ttattaaata 48900
 gtgtagttta taaagtaaatt tgggagtag taactatgtt tattaaagat acttataaca 48960
 tgcgtgcttt atgtaccgct ctgaacagt cggctcctga tacaataata aatacatcta 49020
 aagaagaaaa taacagttac tactgcgcta ctgctcattt actgagaacg gatgtttgtt 49080
 cattggtcaa tagagtaggg attgaaccac taaaagtgg atcaatatta tctactttag 49140
 aagagttagt gcaggctgtt ggtatagtat atcgcttata cgaatggcaa catgtcagcg 49200
 atattgacac caattttaag aaactaccca ataattctga ttttggctt gtgtttctg 49260
 tattagattg tgatatagag tatgtgttca tagggaaaaa agacagtga gggaatatag 49320

aattttatga tccgaaaaac tctctactta tagagaatga tgacataaaa aaatatttat 49380
atgatgaaga ttttcacgt tttgtatta tgctgatcat ctctaaatct gagttggagg 49440
aattgagtcg cgaatcctgc gatcaagaat gtattatggg atgaagctat attaaagagt 49500
ttgggatatg gtagtgatt atgttaaagg ttaattatct gtaacatata aaaaacagt 49560
glatgtaatc atcctgcata atcgtacat tcatatttag agatcttcg gcatactgac 49620
cttgccaatg aaggagatcg ctaaacgggt acaccgtatc tattgcctcc tgaaactcaa 49680
tattgccgc aaagggaac aacgcctgcc agcctgtaac ccatcacgc tggcggtacc 49740
ggaacgactt aacctgagcg ggtcggtcga tttatgcac aatgcacaat gcacaatgca 49800
ctgagcggtg ggtgtcatt cagtacgtta taatgtcatg gatgattaca atcgtgaagc 49860
actggcgatt gtaatcgatc tgaacctgcc aacacagcg cgatcaga gtactggatc 49920
gcattgtggt caacctggc tatgggaggt gccatgccct gttttaaag gaagatgata 49980
tgaagaaaaa catgaagtta atagcaatga ctgccgtact gtctcagta ttagtcctct 50040
ccggctgtgg tgcgatgagc acagcaatca aaaaaacgta atctggaagt gaaaacgcag 50100
atgagtgaag cgtctggtt agagccgtct tcacagaaaa ccgtttatct acagataaaa 50160
aatatctcag ataaaaatat gcttggtta gcccccaaa tcacaaaagc tgtgcaggat 50220
aaggggtata ccgtaacatc tccccagaa gatgcacatt actggatcca ggctaagtc 50280
ctgaaagccg ataaatgga ttgcgtgaa gctgaaggat ttctgagtc ggggtatcag 50340
ggtgctgcgc tggggggcgc attaggggt ggtattacag gctacaactc taactcagcg 50400
ggagccacgt taggaattgg attggcggct ggtctgttg ggatggcgc gaatgcgatg 50460
gtcgaggaca tcaattatac tatggtgacg gatgtccaga ttccgagaa aacggacacc 50520
accctacaga ctgacaatgt ggcggcgctg aagcaaggca cctctggcta taaagttcag 50580
accagcacac agacgggcaa caaacatcaa taccagactc gcgtggttc ttgggtaac 50640
aaggtcaacc tgaaattga agaagcccg ccggttctgg aagaccagct agcgaagtct 50700

atcgctaata tcctgtaagc cataagcatc ctggtatgaa gatgtactgg gatgtagtgg 50760
 atcagtaata ctggacacct caatagcctg ttaatttaac gacagccaat tgaggtaatt 50820
 gataatgact caacctaaac agaccaaacg ccgttttct cctgaattca aactggaagc 50880
 tattgagcag gtcgttaagt atcagcggtc aaccatcgag gttgcacgcg ctctggagct 50940
 ggatcccagc caattgcgta aatggatacg ccagtacaaa gaagaagtca gcgggatgac 51000
 gccggacaat cctgcaactga caccagagca acgtgaaac cagtcgctca gggcgcagat 51060
 taaacggctg gaaatggaaa aagaaatact aaagcaggca gctgtgttga tgagcgagtt 51120
 ccccatcaaa tctttcgctt aacacggctg aaaacaaaat ggccagtgtg cgaattgtgc 51180
 cgcctgctca aaataacgcg cagtgtttac tctgcttcgc tgaatttcg ggttgatgta 51240
 aaacgtctgc aactgcgtga attgcatcaa cagagccggg gagcagccgg cagcagaaca 51300
 ctgagtctgc tgatgcgtca gtcgggttat aacgtggtgc gctggctggc ccgcaggctg 51360
 atgcgggaat gtggtctggc gagtcgcaa cccggaaaac ctggtaccg tggcgaacgg 51420
 gaggtgtcac tggcatgcc agatttactg aaaaggcagt ttaagccgtc ggagcccaat 51480
 cgtgtgtgga gtggatatac cagctatatac aaagtcaatg gtggctggtg ctacctggca 51540
 ctggtgattg acctttactc ccgtcggata gtgggcagt ccatatcgtc atccccgat 51600
 gctgagctgg tgtgtcgagc ctacgctaac gactggaga cgcgccaag ggaaaagagg 51660
 ctgctgttc attcgatca gggagggcag tacaggagta agaaatccag gcagttactg 51720
 tggaggaccg gagtgatgca gattatgagc cgcaggggta actgcctgga taactacca 51780
 atggaaagag tgtccgaag cctgaaaagt gaatggctgc tttaggggg ctatatgat 51840
 gtccatcatg cggtagaga tatcggtgaa tggataaaa gttattaca ccccccca 51900
 tcggcacaat ggtggattac cgccctgtga atacgaagag cgggtgaaaa aggctacga 51960
 ggtgtcctga tttgtgatc cactacata cattcaggag agttggacca gaaatcaggt 52020
 aataaggtcc ggtccactc ccttcaatt caacatgtaa ttcattgtca aacagtcccc 52080

agagcagtaa aacagagatc cggttcaacc tcatacgccg tgccctcggc catgatgcgg 52140
 gcaatcgata cccactttgc ggcgttcagg ctcttgggca aagcgacaga actgctccca 52200
 gttgcacgta tcgcggatcc cctcggggga acatttgtca gccagtcttc ctggctagaa 52260
 tgtgtttaga ttatccgtgg tgattcagt gttgcacggt atcaagcaaa aaccaaggac 52320
 actcttagtt tgaagaggca ggtaataac agcttcagtt aaccatttt actgactgat 52380
 atttatcggt tttttagca agacgagtgt ttctgattat gtacgtatag gataaatttt 52440
 tagtacctat atattggcat gccctgctgt taccgacgag caaaaagaaa ggtcatctac 52500
 agcagattag gtaactgtca aacttggggg atttccata gtcgtcatat agacggaaat 52560
 gtgaacgtgc ccagttcggc attgaggctc ttacgcttca tcgcgatgct tggtcactgg 52620
 ctgcggcgaa cgttgatatt ctatttatat atctttgcgt tatttgggtt gttttcgta 52680
 tttttgatg tttactata aagacgcaaa ttcatagag ataatacata tggacctaaa 52740
 gtcaactctt gaccgctgta ttgaacgtgg acagttcatg actcaagaaa ttgctaaatc 52800
 acaattcggg aatgacagtc cggctgctcg aacgattact agacgtggc gtattactga 52860
 agctgctgaa cttgtcggag taacaccaca aacgatccgt aactatgaag actcaggcaa 52920
 actgccaccg cctgatacag caatgattgg tcgtgttgag caacgaactg gatattccat 52980
 ccagcaaat aatgatatgc gtgatgtgt taaaacaaga ctatccaaac caaaaggcga 53040
 aaatcctgtt gttcttgcca ttgcagctca taaaggtggt gcatacaaga catcgacatc 53100
 tgttcatatt gctcaatgga tggcgttaca aggggttacgg gttttgtga ttgatgcgac 53160
 tgatcctcaa gctacggcct ctttatatca tggctatgtt cccgatctgc atatacatga 53220
 agaagatact ttgtgcctt attatcttgg tcaacgagat gatgctgctt atgcgataaa 53280
 accgactgac tggccaaatc ttgaagtcac tccttcttgt ctggcagtgc atcgattga 53340
 gtcggaaatt tatggcttgc atgatcagg gaaattacct gtagccctc atctttatt 53400
 acgtgctgct attgagtcag tctgggatag ttatgatgtt gtggtgttag atagtcacc 53460

aaacttaggt attgggacta ttaatgtcgt gtgcgctgct gatgtcatcg tagtgcctac 53520
 tccggcggag ctttatgact atgtttccac gttgcaattt ttcacatgc ttagggattt 53580
 gatgtcaaatt attgatctca acgggtttga acctgatgtg cgcgttttaa ttactaaatt 53640
 tagtaatgcg atcggtagtc agtctcagtg gatggacgat cagataagga atgcatgggg 53700
 tggaatggtg ttgaaagaag ttgttcgctg gactgacgaa gtggggaaag gccaagtacg 53760
 aatgcgtact gtatttgaac aggcagctaa ccagcgttca acgccagctg cttggcgtaa 53820
 cgctgtttcg atttgggagc ctgtttgtgc agaaatattc aatcggctgg ttaagcctcg 53880
 ttgggagaat gcatgatgaa aaggtcacca gtgttacgta atgcgccttc aattaatttt 53940
 gatgatgcta aacccgcaat cagcaatgca gagccctcgg tttctgctcc ggcggtgagt 54000
 cagcttgctt ctcgagttag tggcatgaaa ggcaacacaa tcgtattacc tgtttgtgga 54060
 aggaacgttg cttttacgct taaagtata gcagcacctg atgtgaatc taaaacaatc 54120
 gtttttagtg gtaatgagcg aaaccaagca ttattaagt agacgtcgtt agatgacttg 54180
 atcccttcat tttaacgtc agggcagcag atccccgcct ttgcacgtga acataacggg 54240
 aacatcgagg ttgctgatgg aagtcgccga cgtaaagccg cgatactcac cggaagtac 54300
 tataaggttc tggttggtta ctgaaatgat gagcagatgc tatggctgtc ccaaattgct 54360
 aatgagtatc gtccgacgag tgcttatgaa cgaggcctgc gttacgcca acggctaata 54420
 tctgaatttg aaggtaatat tagtaaattg gcagaggccg agcatctctc tcgcaaaatt 54480
 attcagcgtt gtattaaaac ggctgggctg ccccttaaaa ctattcaact gtttgctaac 54540
 cctaataaat taagtgtcgt tagtggcgaa gcattaagta aagcttatga aaataatgtt 54600
 gatacgctaa agcgagttac gcataaaatt atgaagcaaa aacaggaagg tcgccagttt 54660
 actacggaag aattaatcgt attgctgatg cctgagagaa aacagccaga gaacattcat 54720
 aaaaaagct ttggcaaaaa tatagaagca aaatattcaa aagacaatgt ttctttctat 54780
 ctcaaatctg tgccagagtc cttggttaaa caaatagaag aactcttgaa tacctatgca 54840

aaggaacatt cttgtagt cctgaataag atcagaacaa ggtgggtgt ctgcccgcct 54900
ttatttagtg tatatctatt gtttagctc atccttcgta gaagatctcc ttctttacaa 54960
ctcatttct aagctgaact gtggcccaaa tcaccaacgt tagcattgga tatccaggtg 55020
ggaccgtggt cccaattact aacgttgga ttggatatcc aggtgggacc gtggtccaa 55080
ttaccaacgt tggcattgga tatccaggtg ggaccgtggt cccaattacc aacgttgaca 55140
ttggatatcc aggtgggacc gtggtccaa ttaccaacgt tggcattgga tatcaagt 55200
ggaccgtggt cccaattact aacactgga ttgaacatcc tagtggaat gtgattcga 55260
ttgaaagcga ttaagtcgat gagcatttt ttagtatag ctttagggag attaaactag 55320
cggatattc attatggaga taataattt cgcttcatt atcaccctt cgcaatactc 55380
tgttccaa gtcatactat tcttagcca gagctattga tgcataca acttgcata 55440
gatgttact gtgcgctgc ggcggtgtt catcaaacat atctatctga cctggtcgac 55500
tgccgacgtc attaagcatg atgtcggtt ttgatagcg atatccatcc cgccaggtg 55560
gatacggcga tttcatgta gtatcatgt aacaatgac gctctattgc attaaggcac 55620
agtcgtgta catgctgtt ttttatgat attgcctgca catatctta atcaaaaaat 55680
tttttgcg cctgcattac cccatcatg ttatagctca gtgtgttcac tggtatctg 55740
gcgatgccct gagtttcta aatctagagg aaatgatgac gaaacacggt atctctgtg 55800
agcattacac atccacagt tgggtattc gtgtggtgcc attactgcat aaagctttt 55860
gccgttataa atgtaccgtg ggtcgccggt ggccaatgga tgaagcctca aaggtcagt 55920
gaaatacctg taccgggcgg ttgatactcg cggtagact atcgatttc tgctgacgt 55980
aaagcaggat gcggcggcag cactgtgcc actggtatca ggtctcccg taaattcata 56040
tattaaagta ggcagggtg gctcattaca gattgttag ctataattgt attactcagt 56100
aatacataac ggaggggata tggctcacgt aaccagcgt acactggag agcattgac 56160
aggtttgtg ggggaaatga ttcagtctg tcgttatggc aatatacag aagtgttcg 56220

tgatgcctta aggctaattg aagcacgtga acagcgtgtt caacatgtac gcgatatggt 56280
 gcttgagga acaaatgtac ctgtgagcca tcgtttaatg gatgagattt ttctgctgc 56340
 ggtgaaagat actagtgtat aaactgtctg aactagctga tgaggatatt tataatattg 56400
 ccagttatac tatccggcat ttcggtgtga ctcaggctaa gttataccat gagaacttg 56460
 caaaggtatt cgagctatta gctaaaaatc cagagttagg ggctgagtgt aactggattt 56520
 gctctgatat tcgccgtttt cagtataaaa agcacggtat atactatata acgcttagca 56580
 atgatatttt gatttctga gtgctgcatc aatccataga tatagatgtt caggattttc 56640
 cagagcatga gtagtaatac agaagagaga taagtcagaa attctaaca tgagcatgct 56700
 aaaaaacgat tcgcccctga aagatcaggg acgaagatat tcgcaatatt gatagaaaaa 56760
 gggggaaaca ctatccctt gttttatcc atcacatc aatgacagta atttctgcat 56820
 ctgttgcgcc agcccttga tctcattgc tgctgcgtt agatcaacgc cactggcgac 56880
 gtacgcgctg gccgcccac caatagtcc cactgcgag aagggaatac cacaacagg 56940
 cgtgtttaag atggcactgg cctcagctg caattccca ccacaaaact gcatcagccc 57000
 ttggcattga gtgatactgc cacgaagagg gccgctgcc gtagcgaact gatcatgatt 57060
 ttctgcagc atctctgcat ccaagctatt caactgctgc atgtatttg gcagcgtctc 57120
 agcagcaagt tgcttgatac tgcactgaa agacgtagga cttggcattt gtgcaggtgt 57180
 ggggtgctggt gtcaccaccg gtttatggct cccctccgag aacatgcgtt ggataaaccc 57240
 aatcacagag tgggccactg atgataacct ctcaatgata cggctggcta agctggaacc 57300
 ctgagggctt tcagtgcgcc cggccagatt gttgcatat tgatcacttg ttgctgtga 57360
 gactgagcgc ccagacattt ctctacgct gctagatcct gacacagatg tcggcagggg 57420
 cagtgatgta gaaataaatg atgatattt catgactatt tattaccttg gctattaaaa 57480
 caaggttacc ttagtgggaa aatagccgat ggctatataa aaaatcgctg ctgtttttgt 57540
 tgttatatta gacaaaacaa aaactaaaaa ttataggcta aaattgatgg tctgccgaga 57600

gtgctttggt taagttgata ttttatctaa ctattatgag atcataatgt attcattga 57660
 acaagctatc actcaattat ttcaacaact ttcgttgctt attccagata ctattgaacc 57720
 gggtatcggt gtcaaagttg gggaattcgc ctgccatata acagagcatc ctgtcgggca 57780
 aatattaatg ttaccctac ctctcttga caataatgat gaaaaggaaa ccttacttag 57840
 ccataatata ttacgtcaag atatattaaa acccatctta tcctgggacg aggttggggg 57900
 gcaccagtgt ttatggaatc gacaaccatt gaacagcctg gataataact cactatatac 57960
 tcagcttgag atgctggtgc agggggctga acggctacaa acctcatcac taatctcacc 58020
 accacggtca ttagttgag tagattttg gttgtgcct tattatacgg aatgacctgc 58080
 cccaggatt agatacaacg ctacttagt aatgtcggat ccttactat cagaattacc 58140
 cttctccag gccgccgcaa attcagacgg cgtctgataa ttcagcgtag agtgcgggcg 58200
 gcactcatta taatctgac gccattcact gatggtttc ctggcatgac tgacgtcact 58260
 gaaccagtgc tcattcaggc attcatcgcg aaagcgtcgg ttaaaactct caataaatcc 58320
 gttctgtgtc ggcttgccgg gctggataag tcgcagtcc acgccatgct caaaggccca 58380
 ttgatcgagc gcgcggcagg taaattccgg gccctgatca gttcttatcg tcgccggata 58440
 gccgcgaaac agcgcaatgc tgtccagaat acgcgtgacc tgcacgcctg aaatcccaaa 58500
 ggcaacagtgt accgtcaggc attccttctg ttagctgtcc acgcaggtaa ggcaatttat 58560
 cctgcgaccg gtggccaatg cgtccatgac gaaatccatc gaccaggta gattgggcgc 58620
 cgccggacgg agcagcggca gacgttctgt tgccagccct ttcgacgcc ttctgcgttt 58680
 tacgcccagg cactgaggt gataaagccg gtacacgcgc ttatgattaa catgaagccc 58740
 ttcacggtgt tagcgccagt gatataagac ggtaattcac cattagtatt gtccgtcca 58800
 cccaacatgt tgttctctg aggttctcac accagaaagg acatcaacat gctgagcaga 58860
 gaggactttt acatgataaa gcaaatgcgc cagcaggggg cgtacattat cgatattgcg 58920
 actcaggtgg gttgctctga acgaactgtc agacgtacc tcaaataccc tgaaccgcca 58980

gccagaaaga ctcgccacaa aatggttaag ctgaaaccgt ttatggacta catcgacatg 59040
 cgcttgccag agaattgtcg gaatagcgag gtcacctcg cggaaattaa ggcatgggc 59100
 tataccggcg ggcgttccat gctgcgttac tacatccagc ccaaactaa aatgcggcca 59160
 tcaaaaagaa cggttcgcgt cgaaccag cgggatatc agtccagca cgactggggc 59220
 gaagtcgagc tagaggttgc tgggcaacgg tgtaaagta acttcgcgt taatacgtg 59280
 gggttctccc gacgttcca tgtctcgt gcgcaaagc aggatgtga acacacctat 59340
 gagtcgtgg tccgtgcctt ccgttactt cgcggcagt tgaaaaccgt gctggtgat 59400
 aaccagaaag ccgcggtgct gaaaaataac aacggaaaag tgggttcaa ctccgggttc 59460
 ctctgttg ccgaacatta tgacttctg ccacgggcct gccgcccgc cagggccaga 59520
 accaaagga aggtggagcg gatggtgaaa tatcttaagg ataactctt cgtccgtac 59580
 cgcaggtcg acagctcac ccatgtaac caacagctgg agcagtggat ggcggatgtt 59640
 gctgataaac gcgagcttcg ccagtcaga caaacaccgg aacagcgtt cgcgtggaa 59700
 caggagcatc tgcagccgtt gccggatacg gactcgata ccagctactt cgacatccgc 59760
 catgtgtcct gggacagcta tatcgaggtt ggcggcaatc gttacagtgt tccgaggct 59820
 ctgtcgggc aaccagtctc gatactata tcgtggatg acgagctgc gagctacagt 59880
 aatgagcagc aggtggctc acatgactc tgtcagcat cgtctggctg gcagactgtg 59940
 ccggagcacc acgccccgt ctggcaacag gtcagcatgg tagaacatc cccactgagt 60000
 gcttatgagg agttgctgtg atgcatgaac ttgaagcgt gctgagtcgc ctgaaaatgg 60060
 agcacctgag ctatcacgtt gaaagtctgc tggagcaggc ggctaaaaa gagctgaact 60120
 accgggagtt cctgtcatg gcgctgaac aggagtggaa cggcagacat cagcgggca 60180
 tggagtcccg actgaagcag gcgctctgc cgtgggtcaa aacgtggag cagttcgact 60240
 tcacctcca gccgggcatc gatcgtaagg ttgtccggga gctggccggt ctggcgttg 60300
 tggagcgtg cgagaatgtg atcctgctgg gtcctccagg tgcgggaaa acccatctgg 60360

ccgttgctct cggcgtgaaa gcagcggatg caggcatcg ggtactgttc atgccacttt 60420
 atgaagacat tactaacatc ggggtgtact aatcaacgag gagcagggtca ggaaatagcg 60480
 ataacctata aatttgggt gccagtaata tcagatttcg ctacgtaaaa gttacacca 60540
 agttggagtg ttgacttta tctctgttt tttttaatt ttaatgtaa aagacttgta 60600
 ttaagtccat tcacttggtg gcgtcgccgc ctctcattg gtaatgagga gtaccggaag 60660
 agttctcaat gtgaatggtt gagctgtata agttgttat actttatc caggtgata 60720
 caacgttggg gtagcatctg ggaaggagag aaataaaaaa attctatatt ttctaattt 60780
 taaagggtca gttatatcg cacttacagt tcattactg aagaattgc tacagagcta 60840
 ggtctgaag aaatagaaac aaatgagta gggcatgggg ctgttaccat tgataaaata 60900
 tgggtagtac atctggcacc tatcaatgag aaggagttag tggctttat gcgggcaggg 60960
 atcttgactg gtcagtctca actttatgat atttgcgga aaaacctct tagccacta 61020
 tctggtgtaa ttcgtgtgc gcttgataaa gatgatcact ggctatttg gagtcagta 61080
 aacattaatg acaccagtgg gacgcaactg gcgagcgtat tgacgtcgtt ggttgataaa 61140
 gctgttactc ttcttgtga acccacaatg aagaaagagg aggatgatca tcgtccttca 61200
 tcatctcatt tactgggtta attctataaa agaaaaacgt acgatatcca ttaatgggtt 61260
 tgggtgagac tgtaaacaag attgtataat tgctgtttt tgatatctt actccaacaa 61320
 cggagacagg caaatttgat cctccccaa tatccgtacc aggctaaatc agagatccgg 61380
 accttttga tgactcggg caaattctgc cggagtcagg ttatttaacg aagaatgcgg 61440
 atgaaaatga ttatattctt gccgccattg tcaatttc tctgagcat ctccagaga 61500
 aaggaacccg tgcacgttca gacattcatc cctcagactg ccattaaatg actcgataaa 61560
 ggcattatct gtaggtttc cggggcgtga acagtccatc gtgacctgt ttcatacgc 61620
 ccatcggtcc atcgacttcg agatgaatc gctgccgtta tctgtctgca gccttgtgg 61680
 aatacgcccc agcgaatgtt ttaatctgtc catgacagcc acaacatcat ctccacgtaa 61740

ccccgaccg acctcgatcg ccagacattc acgactaaaa ttatccacta tagttagcgc 61800
cctgaccgga cgcccggtga acagattatc agcaacgaaa tccatgctcc agcactgctc 61860
taacgcgggc acttctggac gtgcgtgcct gtgcttcgct gtcacatgcc gccgtggacg 61920
tttgaacgt agattgagac cctcaagaca gtaaatacgg tgcgtttct tatggttaac 61980
aagccagcct tctctccgca gcaggatatg aatgcgcgga cagccataac ggatgcgcgt 62040
ctccgcaatt tcccgattc gctgagtaat agcccgatcg tcacgatggc tacgatagtt 62100
gtatacagtg cggctctgca tcatcagcct gcacctctg cgtactccga tacggtacgc 62160
cgccagcaga tattccacgg catcacgctt ctgcagcggc ctcagaactt tttcggatg 62220
acatcctgca gcatttctt atccagactc agatcggcca ccagacgttt gaggcgctga 62280
ttctcatcct caagctgccg aagacggcgc aattcgtga caccattcc cccaaacttc 62340
ttctccagt tgtaaatgt cgttccgaa atgcccatct tctacagac ttctccact 62400
cgagtaccg ttcagcctg ttgagtga aaagcgattt gttctcggg ataacgcgc 62460
ttttcataa cgaatgacc cttttggac ggaaaagaag ggccgaaaac tctactttac 62520
agcggtagtg aactaagggg gaagatcaag caatcctgt ttgtcgatta tttaaattt 62580
gtttgactc ctccaatctt tgattcaata gacacgcat caatggttt tattatatca 62640
tcaatgccg cccagagatt ttattatta ttgttctgt aattgttt taattagta 62700
ttcaaactcc tcattatcg catcactca tcaatatgt caagcttaca ctttattaag 62760
tcaccctaa gagaaatatt ttcttctca agtttagata ttctttctc tagccgagtt 62820
gttatttctt ttctttct attttctct ttgtgaaaa ataatcaaa gtagtattt 62880
gcaaaaaatg ttaacattac actgagtgtg taaaccagaa attgaatatt tgatggcat 62940
gtggatttag gaatataaaa cccaaccgaa gccataaaaa tagcgggaat tgcatatgat 63000
aaaaatgtat aaatagtcatt tttatttat ctgcttagt ttacatagtt gtgttctatc 63060
cctttgtct taaagctatt acttagctt ttaggggcaa ttctaagaag tcccatagat 63120

gtttctagtt cattggaaaa atttggaata ccccttgagg catcaaacac catgctatat 63180
 gtaaactgaa ccgtaagttc ttttcttca acgtctagcg aatttaaact tgccttaatt 63240
 ccgagacata ctgagttaaa ggaatttgtt gctttatata ctgaaacttc atttggett 63300
 ccattgctga aaaagtcaaa gttctcgaaa gtaaaaagat atttaatttc ataatgttt 63360
 aaactgtcag ttgtgaggtc tgaanaataa taatcacctt caatataggt aaactacca 63420
 ttattttat caagcatttt tatattctta agagattcca cttttctaa aatagagtat 63480
 aaattattct gcaaattcat ttacgcccc ttactgttt atttgatttc attgatgact 63540
 ttataaatag ttgaacgagc tatattcatt ttttggcta tttctgtgc gccatcccc 63600
 tgttcatgca attcgagtag ttctttctg ttgattctgc gcttctgtcc gaatttaacc 63660
 ccccttagct tagcctcttc tctccctca ttgtacgtt ccagtattct ctgtcgttcg 63720
 gcttgagcca ctgctgatag aatagtgaca accattttac ccattcccc atcggtactg 63780
 attccgtcat caataaactg gatggacaca ccctgggcgt caaactctt tatcaactgg 63840
 atcatgtcga cgggtgtcgc gccaaagacgg tcgagcttct tactagaat gacgtcacct 63900
 tcttcacct tcatacgag cagatccagc cctccctgt cggcagagct gccgatgcc 63960
 ttatcagtaa atatacgatt tgccttcacg cccgcgtctt tgagtgttt gatctgaata 64020
 tcgagggatt gctgactggt tgataccgc gcgtaacaa aaagtcgat aaaaatgtat 64080
 cctaaatcaa atatcgga actggtgtct attatacaa aaaatcgatt aaatagacac 64140
 acaaaccgca ccatttcagt gtgtccgaca acttataata ttccgacgg ttaaaaagt 64200
 gttacaaat aaccgtcagg cagggaggcc tgtatgccag tcgattttct gaccactgag 64260
 caagaacaga attacggtt ttacgttgca gaaccaatg acgtgcaact ggtgcgtat 64320
 tttcatctg acgagcggga tcttgcttc atttaccagc ggccgggaaa gcataaccgc 64380
 ctgggaatag cacttcagct cacaacggcc cgtttctgg gaacctttat tacggattta 64440
 acccaagttc tgccaggtgt tcagcatttt gtcgccgtac agcttaatat acgccgtccg 64500

gaagtcctct cccgctatgc cgagcgtgat accactcgca gggaacatac cgcgagata 64560
 aaggaatatt acggctatca tgaatttggg gatcttccgt ggtcttccg cctgaaacgt 64620
 ctgctgtaca cccgtgcatg gctcagcaat gaacgccccg gtctgatgtt tgattttgcc 64680
 actgcgtggc tgcttcagaa taagattctg ttgcccggag caaccacact tgtacgtctc 64740
 gtcagtgaag tacgcgaaag ggcaaatcag cggctctgga aaaagctggc cgccattcat 64800
 tatctgaccg aactaaacgg cagcaaaaaa cgctctctgg atgatgctcc tgaacatatt 64860
 attaccggcc cctggaaacg cctgggtgtac gatgcggagg gccggataca acgtgccggt 64920
 tactcgcttt gtctgtgga ggccttcag gatgcattga gacgccggga catctggctg 64980
 aaaaatagcg atcgctgggg agatctccgc gagaagttgt tgcaggggga agagtggcag 65040
 gctcagcggg tctcgtctg ccgggcgttg ggacatcca ccgatggaca taaaggcgta 65100
 caacagtgg cggtccaact ggatgaaacc tggagagcag ttgcatcccg cttgaagga 65160
 aatacgaag tccatatctg caatgacggg aaatatcctt cctgactat cagcagtctg 65220
 gagaaattgg aggagccact gtcgttgctt cgtctaaaca atcgggtcag gcaactgcta 65280
 ccgccggtag atttgacgga actgttgctt gaaatagatg ccagaacggg atttacacgt 65340
 gagtttacac atgtcagtga atccggggct cgagcgcaag atctgcacat cagcctgtgc 65400
 gcggtactga tggctgaagc ctgcaatc gggctggaac cgctgataaa gcacaatata 65460
 ccggcactga cgcgccaccg gctcagttgg atgaaacaga attacctca ggcagaaacg 65520
 ctggtcagcg ccaatgcccc gttagtgtat tttagtcca cgctggagct tgctcgccgc 65580
 tggggtggcg gcgaagtggc ttcagttgac ggtatgcgt ttgtcacgcc agtgaaaacg 65640
 gtcaattccg ggccgaacag aaaatattt ggctccgggc gtggcatcac ctggtacaac 65700
 ttctctctg atcagtactc tggattccac ggcatcgttg tccccggcac attacgggat 65760
 tccattttg tgctggaagg ccttcggaa cagcagacag ggctgaatcc ggttgagatc 65820
 atgacagaca cagccggtac cagcgacatt atattggcc tgtctggct acttgggtat 65880

cagttttccc cccgtctggc tgatgccggt gaagctgtat tctggcgagt ggataaatcg 65940
 gcaaattacg gagcacttga tgagcttgct cgtgggtgtg cagatctgtc gaaggcagaa 66000
 aatcagtggg atgagatgat gcgaactgcg gggtcgtca agctgggcac cattcatgct 66060
 tcagaactca ttgctcact actgaaaagc tcacggccgt cagggctggc tcaggccatc 66120
 atggcgggtg ggcgtgtaaa caagacgctg tatcttctta attatattga tgatgaagat 66180
 tategtcgcc ggatcctgac gcaactcaat cggggagaga gccgccatgc cgtggcacgt 66240
 gcaatttgtt acgggcagcg cggtagatc agaaaacgct accgtgaggg gcaggaagat 66300
 caactgggcg cattggggct ggtcactaac gcagtggtag tgtggaacac gctttatag 66360
 caggaagcac tgagctggat gcgcagtaat ggagaagaaa ccaggatga ggatatgcc 66420
 cggttatctc cactgatgca cgggcatatc aatatgctgg ggcatatac gttcacgcta 66480
 tcggatgata ttttaaacgg agaactgaga gcattaaatt tcaatttaa caatgaatta 66540
 tctcctaac gtacgtttc gtccattgg acctcaaac ccatcaccgg gtagccacgg 66600
 ttgaccacaa tgcgatccag tactctgatg acgtgctgtg ttggcaggtt cagatcgatt 66660
 tcaatgccca gcttttcacg attgtaatca tccacacaga tcagtgcac gtgcataaaa 66720
 tcgaccgccc cgctcaggtt aagtcgttc gccaccgcca gcggtgatgg ggtacgagct 66780
 ggcaggcgtt gtttccttt gcggcgaata ttgagttca ggagacaata gatacgggtg 66840
 acccgttat ggtccagac atatcccat cgcctcagga ttgaaaaac cttaaagaaa 66900
 ccgtcgcgtg gataacgctc gaccactgat ctggtgttca gtgaatcagt tttttcgca 66960
 tggatgaact ctcaaaatc atattcagta tgcggaaat tctctaaaag agaattggtta 67020
 ttttgatgg tcattacagt acagattatt ttatataatt tattaccac tttttata 67080
 ttttgata gagggaggat aataaataaa aaaattataa agtaatggtt tcttgctgtt 67140
 ttctggtgtt tttctata tttatgttt ttggtgaaa ataagtgtg tgcaggtaa 67200
 ttcaaagga ttatacaaaa tatccggtt gaggtgaggg attttttt atattatctg 67260

cataacactt ttctgtttat ctgaaagtat ttgtagtgg gctgactccg acgattcgat 67320
 tagagattac aaacgatgca tatattcagt agttaatcga tatctttta agatcgatta 67380
 gtgctgtttt ttgcatgatt atcagaaaat aagtcataga taatcctatc cctcttctat 67440
 gggaggcggt cgctttaatt aatatatttc tcagatgta taactgagct ttatttcacg 67500
 ggaaattaaa gaaatataaa aggtgcttac aatgactaaa gattttaaga tcagtgtctc 67560
 tgcggcatta atatctgcgt tgttctcatc tccatagca ttgccgagg agcccagga 67620
 tggcagcgat ggtattcctc gttgtcagc agttcaaata agcccaaag ttgactctaa 67680
 attgggtgtg ggattatc cagcaaaacc aatattacgt caagaaaacc caaaattacc 67740
 tccacgaggt ccacaaggtc cagaaaaaaa agagctagat tagcagaagc aatacaacca 67800
 caagtactag ggcgaggcgg gctcaatgct cgcgctaagg atccctatag cattgcgatt 67860
 ggtgctactg ctgaagcagc aaaaccagca gcaattgctg tgggctctgg ttcaatggca 67920
 acaggcggtg attctgttc aattggtcct ttaagtaagg cattgggaga ttcggcagtt 67980
 acttatgggg taagtagtac cgcccagaaa gatggagtag ctatcggtgc gaaagcatca 68040
 gcttcggata ctggtgtcgc tgtcggtttt aactcgaaag ttgatgcaca aaactctgtt 68100
 gccattggac actctagtca cgttgccgca gatcatggtt attcaattgc aattggggat 68160
 cattctaaaa ctgaccgaga gaatagtga tccattggtc atgaaagcct taatcgccaa 68220
 ttaacacatc ttgcggctgg cactgaagac actgatgcag tgaatgtcgc gcaattaaag 68280
 aaagaaatgg ctgaaacatt ggaaaatgca cgtaaagaga ctttggctca gtctaacgat 68340
 gttttggatg cggccaaaaa aactcaaat agtgttgcca gaacaacttt agaaactgct 68400
 gaagaacatg caaataaaaa atcagctgaa acgtagtaa gcgctaaagt gtatgcagac 68460
 agcaattctt ctcaaacact aaaaactgca aatagctata ccgatgtgac tgtaagtaat 68520
 tcgactaaga aagcaaccgg tgaatctaata caatacacag atcataaatt cagtcaactt 68580
 gacaaccgtt tagataaact tgacaaacga gttgacaaag gtttagccag ttcagccgct 68640

ttaaacagct tgttcagcc atatggtgta gggaaagtaa actttactgc aggtgtcggg 68700
 ggatatcgtt ctagtcaggc attagcaatt ggttctggct atcgtgtaa tgagagtgc 68760
 gcatttaaag ccggtgtggc ttatgccgtt tctcgaatg tcatgtacaa cgcattcatt 68820
 aatatcgagt ggtaatatca ttagaaatt aacaagtcta taggaaaaca ccgattacat 68880
 aatcgtaatt ggtgttttat taatatgcta atgaaaaatt ttttagtaat tctgctttt 68940
 atcatggttt cagttacatg gggaactaca tggtagcga tgaaattaac cgtcgaaaca 69000
 atctctccga tatttgctac gggcatccga ttatgttgg ctgcgcctgt attaatccta 69060
 attacatcaa cccgcaaatt cagcgaagca gagtaaacac tgcgcgttat ttgagcagg 69120
 cggcacaatt cgaccactgg ccatittgtt ttcagccgtg ttaacgcaa gatttgatgg 69180
 ggaactcgct catcaacacg gctgcctgct ttagtattc ttttccatt tccagccgtt 69240
 taatctgcgc cctgagcgac tggattcac gttgctctgg tgcagtgca ggattgtccg 69300
 gcgtcacccc gctgacttct tctttgtact ggcgatcca ttacgcaat tggtgggat 69360
 ccagctccag agcgcgtgca acctcgatgg ttgaccgctg atacttaacg acctgctcaa 69420
 tagcttcag ttgaattca ggagaaaaac ggcgttatcc agaacgtgaa gcgatttacg 69480
 cggcgtgga gtaaccaat gggcggcatg gccgccatt ggtttactta tcagtacga 69540
 gtgccattt gcggccgcgc gaaaaccctt gtcactctaa gtaacgcgga gggtagtcg 69600
 gtactgattt ctccgcagca gaataccgcg caggatattt ccctgttcat gccccgggaa 69660
 ctgacggtea gtcaaggta tcgggtgcga ttaccgcgt cagacacaga ccgggggttat 69720
 gtggccaata gtctgtggga agtggcgggt ttactgaag acggtgctgt gcgtttcgt 69780
 cagggcgacc aggaaaagat tgcgatcca caaaaggcca ccgaagaccg ccatattgac 69840
 ctggcctaca cgctgacagc ctatggtgtg caaggggcca gtgagcggtt tgcatcgcc 69900
 ctgtttgggg ctgaagggtg cagaaagagg atggccactc tgcattctt tacgtgacat 69960
 tgcacgcgc caagagcat gtctaggtct atacggacaa cgttgtaaa tggttgggtc 70020

ttgccgggca gtcaaatgcc ggaaaaaccg cgcattgtag tggatcagta ataccgaca 70080
 ccctcaatag cctgttaatt taatgacagc caattgaggt aattgataat gactcaacct 70140
 aaacagacca aacgccgttt ttctcctgaa ttcaaactgg aagctattga gcaggtcgtt 70200
 aagtatcagc ggtcaacat cgaggttgca cgcgctctgg agctggatcc cagccaattg 70260
 cgtaaattgga tacgccagta caaagaagaa gtcagcgggg tgacgccgga caatcctgca 70320
 ctgacaccag agcaacgtga aatccagtcg ctcagggcgc agattaaacg gctggaaatg 70380
 gaaaaagaaa tactaaagca ggcagccgtg ttgatgagcg agttcccat caaatctttg 70440
 cgtaacacg gctgaaaaca aaatggccag tggtcgaatt gtccgcctg ctcaaaataa 70500
 cgcgcagtgt ttactctgct tcgctgaatt ttcgggttga tgtaaacgt ctgcaactg 70559

<210> 2

<211> 100990

<212> DNA

<213> *Yersinia pestis*

<400> 2

aaacagcccg gcgtgctgga gcgactggaa cgtgaggacg gtgtcattat ccaccagcgt 60
 cgcgagtggc gcatgtacga tccggaaaca ggtaagctca cgacgaaggc cggaacgctc 120
 tggggtctgc tgaagaaaat ccaactgataa caccaaccac tgcggtgagt agccagctca 180
 ccgcgcgcgt atctgggtca taaccactgt agtgagtaaa acggctgccg tggcatccgg 240
 tatccactgt agtgagtaaa gtggtgatta tcgacttcac tatccactgt agagagtaaa 300
 caggcgttca ttacagcaa acaaccacta tggagagtga tggaatgcga cctccagcgg 360
 gtatccacta tggagagtaa accttactg ttttcagcgg atgtctactc tccacagtgg 420
 atagtaaac cagccaaccg attctgctct ccatagtgga tagccaatag cgaagggagc 480

aacgataacc actatagaga gtggatttaa caagtcaccc agtgaccact aacctcgag 540
 cccttgttc atctaggttt gtaaccacta acattcattt cggtatttga gcgctactgc 600
 ctacagtggg tactattcgg ttgtgttac tctactacagt ggatagcgga cttcagataa 660
 aaaaaaggcc cactacagcg gaatagttag cctttctact ctctacagtg attgggctat 720
 ttgcgagcct ttgccttgcg cagctcttcg agaategcca gttcttctt gctcaacatg 780
 accatctcac cgtcttttc ttcaggaaca acatcgatga tgcctcctg accatcgcca 840
 ggcaagtat ctctctgctc ttctggttct tccggcgag ctttagttgg tggcaatgcc 900
 gggcgtaact tcggccgcct atagtggatg atgaagtaga ccgagctgcc gcgcttact 960
 tcggtgtaat cgagatagcc gatctccgc agctgctcca tcgcttctt gactgtcgcg 1020
 ttctgggtaa tgggtcggct ggtaagtta agtctggcg gtaagcgagc caacgagatt 1080
 ggtgccgggt caggtggcaa actttcgatg aatgtgtaga gtgcctgggc ggattcttt 1140
 ctggagagtt cgttgattgc ccggagttgc agaagaacct tttgtcgaa ctggtagagt 1200
 tcgaaaatct taggatcagc ctgcagcgag accgtgtcgt tcttagtgct gtactttgct 1260
 gtctgcacaa ggtgagttac gtaatactca tcagagcctt tactgcggaa tgagatagt 1320
 tttgtggcga tacgagttag agaactgtcc aggcgcttac gtaactcgc ggacgatctg 1380
 gccgttgta tgccacagag cctgacgaac tcgacgaacg gtaacgtgac agtgtcgcca 1440
 acaacctgt gcttggcgaa cgcgtggatg atgcctacc acgttttaa gtcgttatcc 1500
 atatccagac gaacccgga gatccttatg tctcatacc ctteggttt ggccagagac 1560
 agctgttga gttcagcaga ggcgtccata gagaccattt gccccttct gcccctggac 1620
 gtcgattca gcgtcggaac gaagagacca agacgcata gagcaacggg ctgaacagt 1680
 ttgttggtg taggaactaa cgtaacaact tcgcctgtct tttgtctgt ttctgagaat 1740
 gcttcaacga tcgctatgtt ttattgccg tttcgtca ttccaagtgt ctcttttat 1800
 tcgacggctt tgggtggcctt tctgattac agtggatatt agcactcatc acagcggtta 1860

tcctaccgcc tatagtgggt ttctactct ctacagtggg tggtttactc tcatagtgg 1920
 ctgatctct ctctatagt gatatcgatc acctctgagg ccagatggca caacggtttg 1980
 cgggatgcgg ggatctttt gggctcttgt gggctcttt ggttctattt gggatctgaa 2040
 ttactggatc gggcctgtgt ataaaaatca ggtaattgca aaaccagcca tcactccctt 2100
 tctggggata atgtgtgggt gaaacaaaca cgcctgaacg caagattaac gatatatcca 2160
 tgaatatcag ctatctaaca cagaaaaaca ggcaaagagt tatccagtca agacaatgcc 2220
 tcctactcac tacagtggat accgaccact ctccagagag gttgttttgc tcttcatagc 2280
 ggttattatg ctctctacag aggttacttt gctcccata gtggatagta accccctctc 2340
 aggccagtaa ccgcaacggc tggagacgat cggggatctc tttgatctt ctgtaggatc 2400
 tctctgggga tctaattatt ggatcgggcc tgggaataat gggataagt aaaacaggca 2460
 ttgcaaaca tcgggtcgcc ttgtcagtta tcgttcccc ggacaaaact atttgaataa 2520
 gaattatgga tctcaaacgc acgcgctggg ttcgccgtct tgaagatggc tcctacacca 2580
 ttgaatcgaa cactatctg aacaaacaga aattgctctg cgacctatgc ggcatagcgt 2640
 cgaagtgcgc gattaacgaa actcggctca aactctacga cgccgggtgcg cacttccact 2700
 tgaacagctg catacgttac gtgccactgc tggcatttcg taaaccgatc atcggattgg 2760
 acgcacccta ctcaacacg ctccgctctg gtgtaacatg gcgagaccgg gtcgaacctg 2820
 gcaagctcgt ttgtctggtt gaggctgata ctggaaatat catccggttc gggagagtcg 2880
 ataaagtcta ctccggcccc gtggatgaga tctgcggaa acacagccgg ttaaccatc 2940
 tctgcatggg cggagagaaa attgataagg ttggcgaagt gatccgcaa tcctacggac 3000
 acttctgaa cgacgacagc cttctcacgg ccatctacat tcgcatgtc gatcgggagt 3060
 tcgatacgga gtatcacagt gctgaagagt tgaatcttgt cgaccctgc caaaagctg 3120
 gggtaatcga catcagcgtg gcgcgtcaga agccctctga gacgtttta acgtaaactc 3180
 atgggtttac cggggcataa aatatggtgt cttagaaaga cactgagagc tttagggatt 3240

aatacatgag tgaattttat tcaagggcgg cggtgtggc agaccaagct ggcaatgaag 3300
acgaacgagc agggccggtt ttaatttgc agccccggt aatcatagtg acagtaaaat 3360
atctgtcaca aaaacagtac gagagagatt aggatctcag tagtggtcag aagaaaaata 3420
tgtactaggt taaaacaggt acatgtttac tggtagcat cacataaata atagtaatgc 3480
actccaggta aataggcgat tgtccagtag acaaccgcct gtaatgagac tattgcctg 3540
ttcttgctt gttaagccc actgtttct gataatagct ggtatcataa tatttatgcg 3600
tatctgtcag atttttctct ggcttagcaa gcctgcttcg caacagtaga acattttta 3660
ccccttctgc attaatagca gcatcccggt gcagcccat gtaagtaat tctgtaatg 3720
caggctctgc cagctccgcc gtcattcctg gtgcctttt gaccagaatt tcttctgctt 3780
cttttggtt acgggggtca taaatccagt tcagtcctgc gatatagcta cggatgtaac 3840
ttaccagaat atcaccattc tgagccgccc aggagcgggt tgtaatgcca gttgtgcctt 3900
gatagtcgcc aagttcactt ccggaggcaa ggatcttaa cccattttct ttcgctgca 3960
gatttaatgg agtacggaga agtggtgcat ctgtcttacc ggcgagaagt gcattaaagc 4020
gatcattcgt actgccaaca cttgtatagt ggacatcatt ttgtgtcagc ccgtttttct 4080
caagataatt ccggataaca aaggcatagc cagtggtcaa agcgtcgact gaaactgtt 4140
ttctttaag atcactgatg ttcttaattt gagggtagc aactaatgaa agaagcccg 4200
tatccactcc ataaaacgag aacatatccg gattcactac cggctcttcc acctggccct 4260
cttgatacgc gatgacgtta tcaatacctg ctactgcaat attatacttg ccattcagca 4320
ggtttctgac cagttgaccg gaattgggtg tgtaatccat ttacacatta agaccatttt 4380
ttctgaaaaa gcctttttcc tgggcaaccc aaacaggcag gttccacccc cctgaaaag 4440
taatgacgtt aatatccctg atagatgagc ttgattcccg ggtatccgcc gcgtgtaggg 4500
cgccgggcag gataaatgca agtgaaacgg ttaaagccaa gcatctgaac ataatattha 4560
cctcttactg tgaacagttc gtaagagttt aaaaaaatgg gtaatgataa taaagtagaa 4620

agcattctgg ctatctggcg aataactggc tcatttttac cagcaaatgg ataagcataa 4680
 gcgccggtaa ggcagcctcg aatgcgcaga tctcgggtcca ttgccagtga cgaaagccca 4740
 gactgctgag agcggattct agagacatgc ctataaatc tgacgtgacg aagagttgct 4800
 cgttacattt agaaatcatt accgcatga aaataggtat tcacttactt atgtattttg 4860
 tcataatcat gtgcctgtag attttctct gtgccgtgtt gtctgggttg ttcgcctctc 4920
 aagcacgctt aatatctgta tcaaataac cacaaggaa aagacacatg acattgccat 4980
 acgggggtgat atcagatccc cattatcatc gttgggatgc ttttgcgaca acaaacgctg 5040
 acgggctgaa ctctcgactg gagatccaac tggatgccac gaaagaagct gccaaagcca 5100
 tgaaagctgc gggctgcaag cacatgctgg tggctggtga tactttccat gttcgtggtg 5160
 ctatatgcc ttccgtctg catttctga ccgaaacta cgagtggatc atcaaagagt 5220
 tgggcctcga agtggttatg ctggccggca accacgacct cgaaaccaac gattccgtat 5280
 acagcgccaa tgcagcggcc tctctcgct caatcggtgt ggaaatcgtc tgcggcaaac 5340
 gtcctcactc catcaaaatt ggcgacgtta ccgtccatct gattagctgg cgcaataacc 5400
 acgcagagct tatcagcgac ctcaaacac tgcgttccgg gctggatggc gacaatcacg 5460
 atgtcgtgtg gcatacctg atcaacaag cgatccctac catgcctgat gtcggcatcg 5520
 acgcacagga actgaaagat atcggttcc gttgtgtgt gtcgggacac taccacaacc 5580
 acaaagaagt gctgcctggg gtggttagca tcggggcgct gacgcaccag aattggggtg 5640
 atgttggtc gctggtggc ttcatgatg tcaacctga cggcacattc acccaccacg 5700
 aaacctctgc accaagttc gtgaaccttg aggacgatgt ggaagacgat caaattcgcg 5760
 gtaactacgt gcgcttctg gccgtgttg agaacgatga agaaggcatc aaactccaga 5820
 acgtctgaa aacaatgggc gcgaagggtg tcgtctgcaa ctcatccgc aaggcatcga 5880
 tgatggaagg ctctgccagt actgcggaga ccagcaaat agacagcctg ggcgagtcg 5940
 tcggggcgta ctgcaagatc gttcacgaca ctgatggcgg ctctgacctg agcaagctgg 6000

acatgctgtg tcaggaaatc ctgaccgaag cggagagtgc ggaggcagtg tgagtacgaa 6060
 ccattctggg agctttcggg acttcgtctc cacaatgaga agacttgaac gaggccagac 6120
 ggtgatgttc cacaagccct acccacctaa tggaaacct gtggcgttt acctgggaag 6180
 attgagcaaa aagggcgtac taaaacgcaa atccttccc gctcacacgg agtttcaact 6240
 acgaaaaggc cagcatttga atcaaaaagt ttgaggcatt gtatgaaatt tctaaagctc 6300
 caggttgaga acttcatggc gttagccagc gccgaagtg agttagacca acgcggtctg 6360
 gtgtcattc aggggtgtaa cagtggcgac tcttccgtg ccagcaatgg cgcgggcaaa 6420
 tcgacttga tgaacagcct gatgtggtgt ctgtatggcg aaactgcga tggcgtcaaa 6480
 ggtgacgacg tgctgtctac aggtcacgaa aaaaactgtc gtgtgatggt aactgtttag 6540
 gatgaaggaa agcgttacgc catcattcgc caccgcaaac acaaagagt caagaaccgg 6600
 ctgatcgtcc gtggcgaaga cggtgacatg accaaaggca aagacacact gacgcaggag 6660
 ttcgttgaac gcctgattgg tgcacgaaa gaggtgttca tggcgtccat ctacgccagt 6720
 caggaagcaa tgccagatct gccgggtatg tccgacaaga acctcaaac catcgttgaa 6780
 gaagccgctg gcgtcgaccg gttaacgca gcctatgcca ttgctcgca gcgtgctaatt 6840
 gcagctgccg cacgcatgga tgttaccaaa tccaaaatgg acgcctgtct cacgcttatt 6900
 gagaccgctc agtcagagat tgaggcggcc aaagcgtcct ctgatagttg ggaacgcgat 6960
 cgcggcgaac gtctggacaa ggcccgcgta gatttggctg gcgcggaggt aacgctgtct 7020
 gaagtcgtga tggaaattcg ctcgctgccg gaacagatcc gggatacga aaacgcgatt 7080
 gctggcgaac gctgcaagct ggcctccaaa gaagagcatg acgcaaact gctgaagggtg 7140
 cgcggtgca ttacggagat ccgctcaagc atccgcactt cagaagcggc acagaacgag 7200
 tcgatgaacc gtgtcgtctc gtttaaaacc aaagcagaag aggtcagcac aaaggtcgga 7260
 gcaccttggt ttacttgctg aaagccctac tgcgaagaag atttgtccac cgtgaaggag 7320
 agtttcattg aacaagcgcg taatgagatc ggccaggcgc aagcatcagc ttcggcagtg 7380

gctcaacaca aagctcgtct tgagaaagcg ctcgcatcg aatctgact ggtcgcagcc 7440
acacccgacg tttagaaat catcgccaaa atcgaacgcc tgaccaatga gctaagtgcg 7500
ctgcgtcatc gcgaacgtga agttgtggcc gtcgaagcga tgggtggcgcg ggcgcgtacc 7560
gatgtgaatc gcattatggc agaggtaaac ccatttctgg ccgttattaa gcgtcatgag 7620
gacaacctgg ctgccaataa atctaactat gcagtactta aaaatgagtt aaagagtatt 7680
caagaacagg ctctgttctt ggagaaggct cgccagggtt actcccctgc aggtgttctg 7740
tcacacatcc tgacctcgt tacgccttc ctgaacatca ggactgcgga gtatctcaac 7800
acgctatcgg acggcaatat cgttgccgaa tggctgacaa tggagacaac gaagaaaggc 7860
gagtatcgcg acaaattcaa tataagcgtg accaaaacag gttccagcaa atccttcag 7920
acgttgtctg gtggtgagaa gcgtaaggta cgtattgcgt gctctctagc cttgcaggat 7980
ctggttgcca gtcgcgccag taagaatc gagctgttta tcggcgatga aattgacgac 8040
gcgctcgaca ctgccgtct ggagcgtctc atggggattc tggaagccaa agcgcgtgaa 8100
cgcggcacag tgatgatcat ctcccacaaa gagatgaaat cgtggttcg gaaaccatc 8160
actgtgaag tcaaagaggg tcgcagctat gtcgtttaac ttgagccgca cgcagtttt 8220
gcagatgttt gccgtgatgc aatctataaa gctgataaac caccatacgg caaaagcagc 8280
tgcgcctgca cttttgtgga aaaacgaaaa catcaatgac gaccagtct cgttattac 8340
cagtctgttg tcatcgactc cgttgatgcc gagcttggt atgttgccg caggaagcac 8400
tgcgccgac cttgttaacc catttacgga aggtggatat ctccacatt ctgggccggg 8460
gttcgttgcg atacctgaaa ccggaacgct gaatatcaa gaaatgcgc tctcaatgc 8520
aatggagacg cacatcagca ccgcattcac caatctgatt cgacacgcta acgcacgcgc 8580
tgatcacgtt gcaatgcctg gtgctgctt cgccagcgtc tctgttgact atgatcgca 8640
cgcgccaatc tcaaagcggg cgaaactctg cttttacgag gagggatgtg aagtagcgt 8700
tattaaagt ctttcccc atgtattcag cgcgaatgaa aaggttcac accatctgat 8760

cgacatcatg cgacatttca tcggccagag catgattgat gcagacattg ctgcaggtgt 8820
 tctaaccaac gatagcattc atgttgtag cgacattccg aagccgcaa ctgcgagcc 8880
 ggagaagaca ctgaaacaga aactaatgga atgcccaacc tgggctacgt ggtaaggaga 8940
 ccaaaaaatg agtaaaacca ttcgtgtggt tggcgtcgac cttcaatga gcaacttgg 9000
 cctggcgatt ggcacgctgg atctggaaac ggataagctg gacattcatg gcctgacatt 9060
 ggtggaaacc aaagctggtg gcaacaagaa gacggttcgc gtaaacagcg acgatctacg 9120
 ccgcgctaac gaaatctggc gcaccgcaa gcccataatc gagcaggctc atatggtgtt 9180
 ttgcgagttg ccggttgga gccagtccag tcgcgcacaa acctcatacg gcattctcat 9240
 tggcgacttg gcgtgcgtgg ataagccact gatacaggctc acgccaacg agattaagca 9300
 ctatgtcggg aataagctga ccacgtcgaa ggaagagatc attcagtggg ctacgcagaa 9360
 gcagccaaac gccccgtggt tgcgccgcaa gcaatctggt aaggaagtgc tggtaataa 9420
 aaacgagcac ctgctggacg ctgtcgcgtc gatttacacc ggaatgcaa ctgatcaatt 9480
 ccgtcagggt cgcatgtgc ttgcaggat ttataagtc gataattgat aggtagggtc 9540
 ttatctatta acataaggcc actatattta gtggcctttt ttgtgccag aaaaccccca 9600
 gctaggctgg gggttcagta aagcttcag cttgggtca gttataaaa cccctttga 9660
 ttgttaaaa cagtttgcg tctggcaact gcaaatgtc aacaagaaat caaaaggggg 9720
 tccaatgag ggatgaaaag agcttagcgc acaccgatg gaactgtaa tatcatatag 9780
 ttttgcgc gaagtaccga aggcaggtgt tctacaggga aaaacgcaga gcgattggca 9840
 gtattttaag aaaactgtgc gaatggaaa acgtgaatat cctggaagca gaatactgtg 9900
 tggatcacat ccatatgctt ctggagatcc cgccaagat gagtgtctcg ggatttatgg 9960
 ggtacctgaa gggaaagagc agtctgatgc ttatgagca gtttggcgat ttgaagtca 10020
 aataccgtaa cagggagttt tgggtcgag ggtattacgt tgatacggta gggaaaaaca 10080
 cggccaggat acaagaatac ataaagcacc aattggaaga ggataaaatg ggtgagcaac 10140

tctcgatccc gtatcccggg agcccgttta cgggccgtaa gtaatccata gatgcaaag 10200
tcagatcgcg atgcgcctgt tagggcgcgg ctggtaacag agccttatag gcgcatatga 10260
aaaacctccg gctatgccgg aggatattta ttatacccga taacaaaatg tttttgcct 10320
tatccacatt gcgataatta caccaacaag aaaacaagat gtttacgcat ggaggatatg 10380
cacatgaccg atttactat ctcccctaaa gctgaaaacg tatggctgga atcctggctc 10440
gacctgtcat cggaagagaa gcgagaaatg gatcatattg aacaggacga acagtgtgat 10500
gcccgttct tccacttga gggcagcgtt tatgacattg ccgacttcat gcgcatgac 10560
cgattcccgg gctggcacgc aggtaccca ttaatgcct tcgcatgct gatgatccgc 10620
gtggatggct caggcgatac catcgacgc ggttgctcc actaagagaa cgaggccacc 10680
catgctgtg gccttaaatg gccatctgt ttccgcagg ctaaaaacac ccacctctta 10740
ccgccaggct accgaacaac cctccgactc cctgcaggcc accatctgcc ggaacagaac 10800
gcttgacgc cttatgcgcg tagcgataat taaaccaaca agaaaacaaa ttgtttaag 10860
gattatcacc atgaatttta tcgctactgt taacaccct tcgcatggcc atatttctgt 10920
gacgttctct gataacgata aaagcgtgt gggcgctgg cgtgacaatg taaccatga 10980
gctgtccggg aaagagaaac agcagatcac caatgacatt atctgcaacc gtcgccataa 11040
gcgcgtattt gaaaaagcgt atgtctccac ctccggattt ggtgtattca tcttccggg 11100
acgcagcggg cgcttctgcc ggtcaaaact catcgagttc gccacgcaga tcgcgctatg 11160
ggttaaaaca gaatccggat tcgactttac cgaacaggaa gcagtggggg aggggatgcg 11220
catcgccaac aacgccatca agtgcaaaaa cgtcatctat gaagcaggaa tcgactcgtg 11280
gagtatctcg tgcggggact acgtgaaaga ggtgtacgga aagaaccgca ttcacatct 11340
ggctggcaag taagagggga ggggctggaa acgccccctt ctttcgtcc accagttgcc 11400
gcagggaaac ttcagaaacg gccagagagc tgtccgggga accgaaggga aacggccagg 11460
gaatttcgg gaaacggcgg ggtttgcctt tatgtagaaa acagagcggg agaagccaaa 11520

aatcgctcca gaaattgcgt agcggcgctg gggtagttgc cggtaggtt tcagctcctg 11580
agccaccag atagctttcg ccatgtgatt atgtgaatcc gtgggaaagc cactgcaagc 11640
gcgtacacgt cgcgtcaacg tgccaatgat acgcgagcgc ccacggatca tgccaatatt 11700
gccgacacgt cccgaaggat agcgcggatc acgtcgccag atatcgccag acgatcacgc 11760
ccacgacacg acaaaataag ccacgcgcta aaacgcgcta taacgtgttt ttattgttg 11820
gtaatgagta tgtaccacca cacataaaaa cgcgttaaat tggcgcgttt atggcgctta 11880
ttttgtct gtttggctg acttcagaca ataaaaaacg cgccaacaat ggcgcgttat 11940
gggtgcgga tcttgaaacg aaaaaagcgc ccatagtggg cgctattgtt ttatttttc 12000
taagtgaatt taaagccag cgttaaaaa ttctgaatc attaaaagaa catcgattc 12060
tttgattcct gcgcgcttc tatgtccgc gctattcaga tctatttaa acgtggttc 12120
gtcgactact tcagagctga gagcgatcc agctaaacca gcgatatcat aaacaagagt 12180
atgattatgg atgttaacgc cagcgataaa aataaccata aaaacgctcc taaaaaata 12240
aaattgaata cagacttaag atctttgaa taagcgccca tagtgggcgc tatattcaat 12300
taattacgt ttgaaagcgt cagccagata gttataaaaa tcattttga taaagcgata 12360
ttgtcgcat cgtttttag cagcgccat tctttgatc ttctgacca gtccgagacg 12420
ttcacaaga ttgattagtt ggttggttg agttagcca gcgtccaatt taattcggt 12480
ggctttttc gcttcattca tcaaatcgaa aacagcgcca ttagtgaatg ttccaattc 12540
atcattaatc attcgatta atgcgaatac gcgagatccg gacatatcag cgacggaata 12600
aacgcattta ccagactga tagatttaac cagataaacc agttttcga gtgaatagct 12660
attggtcata gcttcacgga aaaacgctc aggtgctgt ttgcttgctt taatcgcta 12720
gtaaaagaca ccagctaatt tctatcatt aacagcgtt aaaacgtgt tggtaaagta 12780
tgcaagttg gtagtcgtg caagcatgtt agctttatct gcttggtgt gcgtaccatt 12840
ctgataatga ttgtataag tctgagtcg attgttggt gcaacttga attcattagc 12900

gataactaca gcagcgtcga tgatagattt ttagagata gcaacgtag acatgatatt 12960
aatccttatg taatattgat aacttaattt gttatttatt tatcgtagc gtgttcgctt 13020
tcgatgtgac taattatcga tatacaaaaa taaatcaa gagtttttg cgcgggaatg 13080
aaaaaaaatt ttctcaata aaaatcaaag tcttagaaat aaaacgcgtt ttctgaagg 13140
tgttgccata ataaattccc tattcggtca atcaccctta tatatttaa acggaaccgg 13200
gattagggga ggtaaata acgggaagt acacataaaa taataaccgg acttagccgg 13260
ttattacct tatagattta aaacggtaaa atccgttcga cccaatcga catgacgact 13320
gtcttcgac cgtccccc atgtgagcgtg gcctggcaag cgtctacgcc tgaagacccc 13380
ccctcaattt cacggccatc cgccatgtag acccttatag acttctgcat ctcagagcc 13440
tggcgacaaa ttttaagaa atcacggcga gatggccgat tgtccacata gtctgggtgt 13500
accgtgtcc gaccgtgaa atcgtgcgca atgccttctg tcacacctga ttcaatcgtg 13560
ctgattcgt caagtgggag cttatacga tttctttgt cgaacggggc agggcaaagg 13620
tcgactttgt tgcgcgacga catgagacc tgaacgtaca tgcagaacac ctgaccatct 13680
tccatcgtga cccttacagg aatgagagac ttacgccaga acatcagcgc ttctccacg 13740
ttggagtaat cgcgcggcca gacttctgca ggaatccgt aggtgatgtc agttttattc 13800
gtcatatcgt cacagtgtcg ttgtaggat atcgatgtca cctgcgttc ttggaatac 13860
ccggaagact ttcgtctgc cagctttggt gatggtctcg cgttcctgac gagcagggtt 13920
cagtgcgcac agcccggcgc cctcaagtga ggcgccaaca atccactgcc cggcatcaag 13980
atggaacgtc gcttttcgc cggctccag ttctgcaact gtctctccat taatgaagat 14040
ggatgcgtcg cagccgcac ctatcatacc ttgtccctc ataaccacca gcgtggttg 14100
ggcagacgtc tggatttga aaactctgc ctgcggagcc ggtttgcat tggctacaga 14160
cactgggcgg gatgaacatg cactcaggag taaaacgggg atggtaatca gtggaagtag 14220
aacgtgttc atggttgaa ctaaatcctt atcactcaa cgaacaaggc gtcttgcgac 14280

gcccttaatg cttaatcgag acgtttgaga atatcgcca gatctctttt ggcatgcca 14340
 gaggattcgt aaatcttcat gacctttca cgagccttg cagaagcctc taatgacgta 14400
 gccgccttat caaaatcggc catcgcatg ttggacagta ccagattgat gacgtctgct 14460
 ttgacagct ttatgttgcg ctacgcagt cgattctgaa aggtttccag cttgtcgta 14520
 gcttttcgg ttaactgaac ctggcagtgt atagcgcgtt tctcgctcat gcttactctc 14580
 tattcaaac agtaaaatcg aatgtgctac ccaccggcaa gactccttcg gcaaaccctg 14640
 gcgctgtgtc gataatgtgc ttccgctcat atgaatgcga catgaggat ttattgctca 14700
 cgtcgatgaa gtcggtaata aagcacacgt tagcctgatt cttttggct cgaagaccgc 14760
 gaccaactcg ttggcgcac tcaacttcgg ctttgccacc gccaccaga atcaccgcac 14820
 ctacgcttg aacgtcgacg ccaacatcca gaatggtga accaatcaaa acatctatcc 14880
 tgcctgccgc cagactgctg agctttgctt gtcgggtagt ctggttgat tctccgtaga 14940
 tgaaatcgac ctacagcgc ctttcttca tcatttccat cagaatctga ccatgacgct 15000
 tcaaacgaac cagcgtcata cagtttagac cgtgacttt gtacattaac gcttcgcgca 15060
 caatggcctc gttcggccc agattgtaaa cgatgcctaa ctgataggct ttctggtaag 15120
 ccgtactcat cccaaccga aagttaaggt gttcgaagc aagttcggcc ctgattcgca 15180
 cctcgtctgg agtgtagcg attttatgat atagaaagta gggttttgct aaaatacctc 15240
 ggctgatcaa atattttcc gtcacctta tctaatgcg acctgcaac gccatgagac 15300
 gcatatttgc ttcggtgag tcttcatga acggcgtagc agtcagcgcc agacggtagt 15360
 cggcattaat gcacaaccgg gcgatatcgt agaagttga accagatgat tcgtgtgcct 15420
 cttccagaat cagcagagaa acgtggaca ggaagcgctt aaccagtcc cggcgcttca 15480
 ggtggtaccg tttttctct ggtgaggcat cgcgcggcgg ctcttcgaga aaactggcca 15540
 gggctgcac cgtggcaacg ttgatggc gcgagacctg gaactacca gatccaatca 15600
 cccaacttt ctgaccttc agccacggct cgccattctc cgcgcggtag tcgattgatt 15660

tctggaagtt ctctgccatc tggaacatca gaaccgagcg cgtgggttaa aacagcgtca 15720
 tacgaccaat gcgagcagct gccttacacg ctacgttoga ttaccgcca cccgtcgcaa 15780
 tctgggcaat catcatccct tcgcgcacca gtgtttccac agtctgatcc tgatacgc 15840
 agtccggggt atacgggaat ggggttaacta cgggttcgg cttgccacgc gcggggggtt 15900
 ttctcttgcg cacatgcacg catttgatgc cagctttcag aaggttgcc gctactggct 15960
 tcgcaaacc agccgggaac gcgttttgc tcagttgaa catcgtgtg gtccctttcc 16020
 agtcaccagc ctccacttca tagctcaaca tctctgaac gagccgcttc acgttgcat 16080
 cagcgccaga aatcagcgca ttgactgcat tcgatacaat ccgaactgtc ataaacctct 16140
 ttctctgtg ccttttgtat ggtaattggc tattatagta agtaagtact tatataatgg 16200
 attgtatcag aattatggat gtgaaaatta cgattctgca ggtggaagtc gcgaacctgc 16260
 gtccgaatcc ctggaatacc aactccgttg gggcgcaaaa ctgcgaaaa ctgaaaggct 16320
 ctatcgaaaa attgggcttt ttaagccaa ttctggcgcg ggagctggac gggggcattt 16380
 ttgagatcct cgggtggcgaa caccgctggc gtgccgcat ggagcagggc attcaacgg 16440
 ttcccgatc ctccgtgggc aaaattaacg acctggtggc caaacagatg tcctctgtcg 16500
 ataacgagcg ctacggcgaa gacgatcagg ttgctttgca gcgcttaac gaagaaatcc 16560
 agtctgaaat cgactaccgg ttgtccgata tcgcccgtg tgacgacgaa atggcggcaa 16620
 cactcgccaa agcgtccgtt atcgatcttg aagcgtgga agcgtctcc cgtggagatg 16680
 acgagccgat cgaagaggac aaacgcgaga aaaccgagcg agtcggtgct gaacaccaga 16740
 cgatgcgctt caaggtgaca ttgatgcat cagatcgct cgccgacacc atcaaaacca 16800
 tcatcaaaga gcagggaatc aataccggta acgaaatgga gaacgccggg gaagccctgg 16860
 tgtggctggt cgactactac aaggagcgta tgtaatgacc aaaaacttg aaatcgtcta 16920
 tcgaaaccgg gcagaactca tccgtatga gatgaacgcc aaaaaacatg acgaacagca 16980
 gatccgcgac ctggctgccg ccatcaaaaa gcgcgggttt gaccagccga tcacggtcga 17040

caagcacgac gtcattatta ctggccacgg tcgtcgcgag gcggcacttc tggctggtct 17100
 ggagcgtgtg ccggtcatcg ttccgcacga cctgagcgaa gaagaagtga aggcaaaacg 17160
 cctggaagac aaccgcctgg ccagtattga ctacgacgcc atcaaattgc agcaggaact 17220
 tgaatccctg gtgctgggcg acgttgaggt cttcggtttt gaagagcgcg agctgaacgt 17280
 gcttgtcggc agcatgaccg aagagatgga aaccggcgct ctggtgctcg atctgggcga 17340
 agagacggaa cgccagaaag aagagcacac cgagatcagt cgcgaagtgg ccgctgaaga 17400
 agtccgcgtc atcgacgtat tgggctttaa aacgctccct gctggctctg ccattgtggt 17460
 tggggatttg ctgcccaca tggaggaaat cacgggagag tgcggggtag acgcttctgt 17520
 ggcgtatgcg gagaaagttt cttctgggga gctggctgca tgagcaaata caccatcaac 17580
 gtatcgttgc agaccgcgt gaataaaacc atgcgcacgc tggagattgc cgaatcgttc 17640
 ggtcttgcc tggacgaaaa agagtggacg ctttacgaca atctggagct ggaagtgaag 17700
 cagggcgatg tgggtgacat caccggtcag tccggttccg gcaaatccgt tgtgtgcgc 17760
 gagctgcaac gccagatgaa ggatgaaggg cttctgtag cctccatga tgactttacc 17820
 ttcaacaatg aggttaacgt catcgaccag ttgggcaaaa ccaccagcga tgcgctgggg 17880
 ctgctgtcta tggccggatt gaatgacgt tatctctttg tgcgcaaacc atccgaaatg 17940
 tccgacggcc agaaataccg cctcaagatc gccaaagtga ttgagtcgg cgccaaagtc 18000
 tgggccgccc acgaatttg tgctgttctc gaccgtgtaa cagctcaggt tgtggcgtcg 18060
 aacctccagc gtgccgccc caaggttggt gcgacggtaa tggtggcgac gaccacgaa 18120
 gacctgaaga acgcgtgcg cccggatatg cagatcacca agcactaaa agaacgcgtg 18180
 aagtggaat atgcctgatt tgaagatcgt tgagctgaag ccatcgaaag aggctgaaa 18240
 caacaacgtt gaagtcatcc gcctgctgga agaagcactc cagcacgcca gagaaggtaa 18300
 aagccagagt ctggcggtgc tgatgatcaa caacgacggc agtgttctgg attgctggca 18360
 taacggtggg cgtccatacg tcatggttgg ggcgatggaa tcgcttcgcc tggacttcat 18420

caatgccaat atcgagcgca ggtgatcgac atgacagaca tcatacatcaa acgctaccgc 18480
 ccggaagagt tcccgcgtca tctggacttt ctggagcgta tgaccgttac caaaggcacg 18540
 gttgaagact ggcacgcgct gaagtcgctg cactataaga cggatggtaa gccgttcgcg 18600
 ccaacgtatt atcgctgcga actggacgac cggctgggtg gcgtcgtggt tatggcttac 18660
 ccgaaactgc tgctggcgcc tcgccatcg atgtttccta agctgaagcc aaccaccaat 18720
 accaccgtgg ccaaccagta ttggggggcg tacgtgaaca acaactttgc ggtgattagc 18780
 cgttccttg tggacactca gtaccgcggc gtcggcgtct cctatcgaat gattaacctg 18840
 gttagcagga tgcacgaccg gccaatcatc gagatccagt cgtcgatgag caaatacaac 18900
 ccgtttgcca tgaaagcagg gttccagttc atccgtccgg agcgtccgaa gagctatgag 18960
 agtgcgttg gcgtcttcca gcgtcattc cgttcgacc ctggcgacaa cgaagcgatc 19020
 gtcaaagagc tgttcgcat gagtgagtct cgccgtcgtc gtgcgtcg tgatctggtc 19080
 gctgactacc acaagaacag ttccctggcc aaagccgggc gtaatcgtgg cacgacgatt 19140
 caggacattg ccgacagcct ggtggacgag gccagcattg tgaagctgct caaggatatt 19200
 cacaacctga gttcacgtc tccgtgtat ggcgtgtacc gaaacccgga ctttgccgt 19260
 cagttgcctg acacgtgcc actgctggca ttcgacaaac agccttgaa caaacctctt 19320
 gaaattgcat taccggcata aggatttgc atgacgttga ccgacaaaca aaaagacatc 19380
 atcaaaacca tcaatttagg ccatgagcgt gggcatctgc tcgatctgga cgagctgctt 19440
 gaagtgtgc cgtacaaaac gaccaaacag agtatgcagt tctctatccg cgcactggtg 19500
 aaaaaggggc tggaggagaa aggaatgtgc cgccagcgcg gtgattctgg ctaccaccgt 19560
 cgcacgtgg ggtgaccac gttaggtcgt gccagagcca aattactggt gatgtaagtc 19620
 ggtctgggag ccagtttag agcctgttc cgtatatata aatactaagt gacttattaa 19680
 atatatacgg aagcaggttc tgaatactcc ccagcccgtt tttaaacacc cagaaaacaa 19740
 attggttagg catagaatta aacaagttgt ttaggagcgc aaggatgcgc tctgagtgtt 19800

tttagaggat ctatgactgt agaaaaagac gagagcaaaa ctcgcctgac gccagctgag 19860
 tgggcagaag ccgaagcgaa gtggacttcc ggtgaataca cactctccaa gctggaggaa 19920
 gagtacggca ttcgtcgtga aacgctctcc agacattica aaaagcgtgg attagagaaa 19980
 ggcgcggact ccgtggggaa gatggtgcgc gagtcgctca aatccgacgc agagctgcgt 20040
 gcgaaggcgc gtgcagagaa aatcgaagag cgccggactc gttacgacga ttgggcgttc 20100
 gcaactcggc ggatggtgat gcatgagggt gccacagcca agaaggacgg caagccactc 20160
 gcaaccatcg aagatgacct gaagagtctc cagcgtgcc a gcggcacact cgctaagtgc 20220
 ttcaagtat cgtcgaaagc gctcggatg gatcgcgccg aaaacgagga cgacgaaatc 20280
 ccgaatctgg tatttggcga acttacgcct tcccagggtg gcgagctgcg taaggaagat 20340
 gatgagccgg atctgattga tgacgatctg cttagtcac tcgaagagga agcactgagc 20400
 gaagctgagg gcgattctga cgcgtctggt gatgaaagt atgggagcgt ctaactatgg 20460
 ccatccgctc gtctctgagt ctcgtacagc tgcatctggt gcagatgcaa gtcttcag 20520
 cgccacatcg ttcaaagta gtgtgtgcgg gtcgacgctg gggtaaatcc cggtgtcga 20580
 ttccaccat cattcgcg gcagccaaag agaagaagca acgtgtctgg tacgtcgac 20640
 cgacgtacca gatggctgc cagatctgt gggatgacct gcaggaagtt ctgcccgta 20700
 aatgggttcg taagaaaaac gacaccacga tgaccatcgt gctgaagaac ggctctgaaa 20760
 tcgcgtgaa aggtgcggat aagcccgata cgcttcgtgg tgtggcactg cactttgtgg 20820
 tgctcgatga attcaggat atgaagccgg atacctggt caaggtactt cgtccgacac 20880
 tgctctaac ccgtggcggg gcgctgatca tcggtacgcc aaaaggcttc tccgagttcc 20940
 acaagctgtg gactatcggc cagaacaaag atttgcaacg caaagggcag tggaagagct 21000
 ggcagttcgt tacggccgat tctccgttcg taccgagcgc ggaaatcgaa gcggcgaaaga 21060
 acgatatgga ccctaaatcg ttcgcacagg aatactggc cagcttcgaa aacatgtccg 21120
 gacgcgttta ctaccgctc gaccgcaatg tgcatgtgaa gccactccag ttcaatccga 21180

aactgccgat ctgggttggt caggacttca acatcgaccc tatgtcatcg gtcacctgc 21240
agccgcagcc aaatggtgag ttgtgggccg tggacgaggt tgtgtgttc tttccaaca 21300
cggctgaagt gtgtgatgag ctggagcgcc gttctggcg ctggaagtct caggtcacta 21360
tcttcctga cccggctggt gcgtatgcc agcacgcacg cggcgaatct gacgtcgata 21420
tattcaagga aaaaggttc ctccgagtcg attatccgaa gaagcaccgc cctatcgag 21480
accgtgtgaa cgccgtgaac cggatgttga tgagtgcctc gggcgaaacc cggttgtaca 21540
tcgatccgaa gtgcaaacat ctcatcgact cgctggagaa ggtgatctac aagccaggct 21600
cacgcgatat ggataagact ggcggcatcg aacacagtgc ggatgcgttg ggttatccgg 21660
ttcatcgtag gtatccggtg aaaaatcgtg ttattcttg tgatctaga taagtaagt 21720
cctacctaaa tatggaaaag aaacaaatgg aattgactga taagcaaac aaggacctg 21780
tggcacgacg ccacccggaa tatgagaaga aaaaagaaca ttgggatttc ctgccagca 21840
cctacgttg cgggcgtgcc tggttcaacg acaatatct tcgttacttc aaagaggcg 21900
atcaggagtt caaagagcgt ctggaacgtg cctatcgctt caaccacact cgtgaagtgg 21960
taaacctcat caacaaatac ctctcaaag aggtcattca tcgcaacacg gatgaagcac 22020
cggagcagat ccgcaatttc tggaagcgag ccacgcgcca gaacgcctcc atcgatgcgt 22080
ttatggcggc tatgatctg caatcatcca tctatggtcg catctgggtt gttgtggaca 22140
gcacatgaa cgtcgatgtt gagtctgtg cagacgagaa gaaaaatgat gcgcgcgcct 22200
acgcttactg gatttcgccg cagcagctgc ttgatgtgc ctgggacgaa gacggcaata 22260
tgttgtggc gctgattgtt gaaatcgcg gcgacgacga agatccgttc acgtcaaccg 22320
ggcaggaata ccagcgttac cgtctgtgga cgcaaacga gtggtatctg ttccgtgaag 22380
aagtgaagaa aggttccgga aatagcggtc gtcgtcaggc caaagtcgtt ctggaggata 22440
gcggcgagca taatctgggc gtggtgccgg tgttccggt ggattgcatt ggtgaaagcg 22500
agtcctcgta ttcagcccg tcgttgattg atgatatcg ctatcttgac cgcgccgtgg 22560

ccaactacct gtcgaacctt gatgcgatta ttcaggatca gacattcagc cagttggcga 22620
tcccgggtca gtcattgctg ccgggcgatg aaaaccacac caaagtgctc gaaatgggga 22680
caaaacgcgt cttcaccttc gactctgaga gcggtaatca gccattctat ctgtctccag 22740
acccgaaaca ggcccagatg atcatcacca cgattaagac ggtgattaac gagatctacc 22800
actccgttgg tgtggcaggt gagcgaacca agcaggataa cgcacagggc atcgataact 22860
cttcggggcg agcgaagatg tacgacttcc agcgcgttaa cagtctgctg gtgacaaaag 22920
cagaacgcct cgaaaggga gagcgccaga tgatgcaact ggcagcgaaa tggatgggtg 22980
tcgaactgga tgaagaccac tctctgatcg cgtaccgga aagtttgac attcgcggtc 23040
tgactgacga gtttgccgtt gctgagaaac tgctgctgct ccaggcgctt gattctgttc 23100
gtcgtcatca gatggaaatg ctcatcgaga aggtcttccc gaacatttct gaggcgatgc 23160
aaaaggaatt tcaaaaagat ctcttgaaat ttctccaaa aaatgatctt aacacccttg 23220
aaaataagtc agtacttact tatgatcgag atatatccca agaaagcggg caagatcaac 23280
cccaggggaa tggggactca tctactcaag agaccgagtg ataagtaacg aaaaggaatt 23340
tctatgaatc tgtggcaaat gcttatggcc cgtcgtggcc tgatggatgc agctgaagcg 23400
catgagcgcg gaggcgctgg tggcgggtgct cctgctggag acaacgagca gggcaatcaa 23460
gaccagga aacaggggca gcaaaaagag caaccgaagg gtgacgacga cgagtatgcc 23520
ggtatgactc aggaagagtt gctggcagaa ctgcgtaagt ccaagaaagc tgggtgctgac 23580
ctgctgaaag agaacatgaa gcgcaaggag aaagagcgca cattggccga tcagctggct 23640
cagtacggtg atattgacct ggcgctgct cgccagcttc tcgaagctga acaagccgca 23700
gaaaccgcac gccgggaggc ggagcaggct gaactggaac gccgtggtga gttcgatgct 23760
gtgaaaaagc agatgatcga agcgaccca ccaggctgaa ctggcacagc gcgacgaacg 23820
ctactccgct ctggagagcg agaacgccga actgaaggct caactggtcg aaatgactgt 23880
tggcgcttcc ttcagcggtc ctgccttct gcgtgacaaa gttctgatga ctccggctaa 23940

ggctcgcgtt atctacggct ctcatttcga agtgggtgaa gacggtagtg ttgtgggctt 24000
 tgataagcca gccggtcaga aagagcgtgc agttctggtt gacgggaag gcaaaccgtt 24060
 accgttcgaa tccgcgattg aacgcattct gcgtcagat ccggaagctg acgcactgtt 24120
 gcgcagcgaa gccaaagcagg gtgctgggtc caatagcaaa ccgacccaca aagtaaacca 24180
 gccgaagagc aagtcgacta tggataagtt gacctccggt ctggggaaaa tcggactcaa 24240
 gtaacatctt aaatcatagg gaaatgaaag atgccattac tgcgtgatga agctgaaaag 24300
 ctatctaaca acgaacttga gcagggtgtg atcgagacca tcacgatcg cgatgacctg 24360
 ttcgtgttc tgccttcat gaagattaac tctaaggcat acctctacaa ccgcgaagct 24420
 acctgagcg aagcaacctt cattgatgtg aacgacacca tcaccgaagg cgctgcaacc 24480
 ttcaccgaac acgttgcgaa gctgcgtatc ctggcaggcg acgtagacgt cgacaaattc 24540
 ctggcgacca ctatgtccga caccaacaac cagctggcaa tccaggttcg tcagaaggtg 24600
 aaaggtcttg cccgcgcatt ccgcgcgaac ctgattctgg gcgactccac caccaacacc 24660
 aaagctttcg acggtattcc gaagctgatg cacgacgatc agaagatcga catcgaaggc 24720
 gcttccatga cttctccat gttcgacgag ctggtcgacg cggtgaaaga tctgggcgca 24780
 gactgcatca tgatgcgttc cgagcacctg cgtgcttacc gcgtctgct gcgtaccgtt 24840
 agcctcggcc cgtcagaaat catgatggaa aacttcggcc gcccgatgct gtgccacaac 24900
 ggtgtaccgt tcacgtgaa cgacttcac cgcactgatg ctggcaaagc aagcatctac 24960
 tgcctgcacc tgtccgaaga gaacgggtgtg accggtctgt atggcggcga aaacgccggt 25020
 atcgttgttg agaacatcgg tactgttcag aacaaagacg caaccctac ccgcgttaag 25080
 tgggtactgct ctctggcgaa caagcacgat aaggctatcg ccgcgtgac caacgtaaaa 25140
 attgatcag tatcgtaggt aagtaattat ctaccattta aggggtgggct atacgccac 25200
 cctttttgta ggagcgagaa atgccagaac aaaagatgaa gatcacggaa gaggcgtttt 25260
 cggatttcac ggggcatatg tgccgtgccg gattcaccaa ttccatctcc aacgagcctc 25320

tgagcgagcg ccagcagaat catcttgcgg ctgcttccg ggcaattccg ttcactcagt 25380
 ctgtcacat tacaccgact gcgccgtccg tattggtggg caaaaccgtt caacttagtg 25440
 caggtatcac catgagcaaa agtgcagatt cattcacctg gacgtcagac aatgaccggg 25500
 tcgccacagt cagcggtagc ggtctggta ctggcgtgac tccgggcaaa gtgaagatca 25560
 ccgccaccga taagcagact cagctttctg cctcagtcga agtgatcgtt aagcctgtca 25620
 gcgtggagtc cgtaaccgta acgcctgact ctacctcgt tgagaagggg aaatcggtca 25680
 agttgcgtgt tgatgtacaa ccgtcaaatg caaccaataa aaaagtcacc tggactcca 25740
 aaaatagcga caaagcgact gttgaccaga acggtaacgt agctggcgta gccgttggtg 25800
 cggcaactat tgaagtgggt tcgcaggatg gcagccacaa agctactgcg actgtggaag 25860
 tgactgcagc accggctgcg taaccaatac atgggcggca tagccgcca ttaagtgaga 25920
 agaagaatga aaccagcaaa aattcgttta ttggagcctc aatttttggg gtacacgggc 25980
 attctctgcg gtatccagtt tctcgacggc atctcggtt ccgaactgcg attcatcgt 26040
 cagcagcgga ttgtgcctc catgcgtgcc actaccgtt aaggcaaaaa tgatctcct 26100
 tctgccgct acagcagccg caatgattt actgcggacg acattgtcga gacggcggcc 26160
 ccggaattt tgccaatgaa acgtggtaca gctgaagtgg aagccaaacc ggtacagcg 26220
 ttactcgtg aagaactgga gtcgattgcg gactgtgaag gtattgcggg tctgcgtcag 26280
 atcggaacc agattggcgt gaaagccaaa ggcatcgtt aaatgatcga aggcacctg 26340
 aaagcacagg gcggtgagta atggcgaga tcgacacgta ccgtagcggg gaagctgtt 26400
 ccctgtcgt tgcatcgtt gttctggata ttgagtcggc cacgtatacc gtcagagatg 26460
 gcgctggcg gatcatcgt gataacgaac ctctgatata tactgagggg cagatgtcca 26520
 ttccggtgt cgtgtcgcc gaacacaacc tgcttcaga taaagagcg gatctgcgac 26580
 acgtcattgt caaagcggg gcacccggg tgacgatga agagcgcaag atgtacgtt 26640
 tgctgaatag ctctgagctg tcaattccag gccagtcatt cgcaacggc gcagacgcc 26700

agatgcaagc tatcgatatg ctgaacggcg acaccctgtt agctgatggc gaagggtga 26760
 tgcgcaaacg tctcattgag gccaccagac gcgtcaaac gctgccgttc tcaatccgca 26820
 aagtcctgcg tatcgacttc gaccggtacg atcgcccgca aaacatgctg aacgtctatg 26880
 acattccgtg gggcgctgac ggggcatatc gtcacgatct gatcgattgg gagcagatga 26940
 cgccggagaa attcgacgag ttcccgact acttcaaca ggcattaatg ctggccgtgg 27000
 ttaatgaagc ctgcgaaac gtaacggta atgacgtacg ggcagccgc gaggacggca 27060
 ttctgtctga gtccattggc gaaacgacca atatgtaccg taccggcaaa gcggcaaacg 27120
 tgcaggtggc tcgcagtacc tggcgactgc tggtcagtta catcaataac cgcattgattg 27180
 ttgcctgtgc gtaacgccag tcgcattatt tacttctggt cgaaaggctc aagacgagca 27240
 atcgcgctt cgcttggtaa tgagtgcggc tgccaaccac agggagagtg catgaacatt 27300
 tcatggcaag cagagatagc gatttaccgt ctgggtcga agaacgtcta cggatgaagcg 27360
 caattgcagt tcgtcagaaa gacgaacgtc ggcgtcgtta agtttgagca aagtaacgag 27420
 aagtcacgg tacgtgctga cagctccggc agtcgcggta aagcgaatct ggaattgttc 27480
 gatgtgttc tggatgccc acttgaggcc gcagtacgc ttgatgacgt tctcattctg 27540
 gaggggcaaa agctgaaggt atccagcgtg catcgtcgtt ggggactgcg tgggcgcctt 27600
 gggcatctgg aagtaggggc aaacatatgg gtctgaagta cgacgcgat cattttaagc 27660
 gtgctggcga caggctcaat aacagccaga aagcctttaa gcgttatctc atccgtgaca 27720
 tggagaagct ggcgcgtctg gttgagcgtc tggcgcgggc aatggccccg ctggagactg 27780
 gctcactcga aagcgcgatc ttcgcgagag ttgtcaaaga aggctatacc gggctgcgta 27840
 ttgagttatc ggtatctgga gccaaaccac gcgaaggta tccgggcgtt gaggttggcg 27900
 attatcgga gtacatggag ttgggcaagt atcgtctcg ctatctatcc cgcataaga 27960
 gcgtcaccaa cccgccagtt gctggagtga agccacgagt tgggcctttg ttccttgaga 28020
 gagccgtgca gatcagtga aaacagttca ctacagcat agcagaagcg gcaaggaaag 28080

caggttttac gagaggttga tgtgtttatt gaagcatttg cgagcctgat gcagaaggcg 28140
aagatcggta cagtcggcac tgacatttc tgcactaca tgccagccaa tgtgaagtcc 28200
gggtgtctgt tggttactcc caatacgggg atcaccattg accatgagtt aaaaggcttc 28260
tatacgcact ctttcaccgt catcgtcgt aatgcgacga ttacaaagac ggtggcgaaa 28320
gccataaga tcatggacat gtccccggtc gaagaaaccg tgcagatgg cgtttacttc 28380
cggttgggtc gaccaatgc gatgccgatt acttatccca aaaatgaagg ttcgttgatt 28440
gaagcgggta tcccgattga atttgcgggc tatttgtga attaataaaa taggtaagta 28500
tatacttate attaacacca tgaagggtct gatttaacgg aaaaaggagt ttccaaaaa 28560
tgtccaatac ccatgtaaaa aacatcaaac ttggcgcctg caaagtgtcg ttggtggcg 28620
ttgatctggg ttacacaaa ggcggtgttc aggtgaagt tgcgaccgaa actctgaaag 28680
tcaccgtaga ccagctgggg cagaccacca tctccgagct ggtacagggt cgtaacatca 28740
ctatactgc gccgtggcc gagtctgtgt tgcagaatat ggtcgatctg atgccgggtt 28800
ctaccctgag cgaagaagag aactctgtga ccatcacttc cgcacagggc gtcaacctga 28860
tcgacgtagc caaagagctg gttctgacce cgcaagatac caccgactat gtctgacca 28920
tcccgaagc tgcaaccgca ggtaacttca ccatgacctt ccagtctgat gatgttcg 28980
tgttctcgt tcagttcacc gcttaccgg atgacgacgg cgtgctgggg aaaatgagcg 29040
gcccgaagcc ggtaaaacc gtctctatct ctccggaatc tccggaagtt aaagccggtg 29100
agaccgtgca actgactgcc cagatcacc ctgcagatgc cggcgacaaa accggtgtgt 29160
gggaatccga caatcaggag aaagcaaccg ttgaccagac tgggtctggt cgcgagtag 29220
ctgaagggtc ggcaaatatc tcctttacca gcaatagcgg cggcaagaaa gcgaccaaag 29280
cagtaacggt taattctgcc caataatgc gacgtaatta agcagaggct caggaagagc 29340
ctctctttta aaaggacttt aaccaatgac caaattactc gatctcgact ccattctgcc 29400
tccgaagaaa agcatcaagt tcggcgggtc ggaatatccc atcggtgaaa tgactgttgg 29460

cctgttcgtc tctatcaagc agatggaagg caaagacctc cagaatatgt cgcctgttga 29520
 gcaggttact gcttacgccg acctgggtcg caaggctatc ccatccgtgc cggacgctgt 29580
 actggaaaaa ctgactgttc cgcagctcca gcagatcttc accttcgcta tggaagtgat 29640
 tgatgaagag aacgaaaaag cggctggtga aggggcaaag taatttcccg cgatgaatcc 29700
 ggggtaaaga ccgtatcgat agatctcgga ttctatttca gtcgtgtagt tgctcactac 29760
 gccgtgtgc cattagagct gctgggctgc ccttaacga tgttctggat gctcagtcgc 29820
 aacatcgacc gtctgcgtgc ggaagaggat gtccgcaacc tgcaagtcgc tcgcgctgcc 29880
 caggcagatg gcgagggcgt aaaggcgttc atggagggtt tgcaactcag gattggaaga 29940
 ccagtcgtaa ccgataaagt ctacgatcca cgcaaggata aggcagacct tgacgccaaa 30000
 gagcaactga tgcaaatttt tggcagagga tgacaaggga atgtcacaaa acgtagagtt 30060
 tctctgtcg ctggaagaca agcagtttac agcgtcaatc gaccgggcgg gtaagctact 30120
 taccagattc ggggagcagg ccacaaagcc agctcagaaa attaacaatc tggaacgctc 30180
 gttgggttcg gtctcccga tcatcggcgt tctggagtcc aagctcgatg tcacggcaga 30240
 aaaactacag gatgtagctg ccggcttcga gcttgtgtct gatgtttcgc gcaagacgcg 30300
 aggcagcatt accagcctca actcaggtct caaaaccctg attgagcgcg tcgacacaac 30360
 cacctcatcc gttaataagc tcaccacatc gctgcgcaag gttcagtcgt aactcaatga 30420
 gttttccgat tgggcaacgt tcgctggcaa gagcgccagc cgcttcggta cggaggtaaa 30480
 agaagcctct gcacccgtga gcggcatgaa tacgcgtctt aacaccacga caaagcgtct 30540
 cagtaattgg ggtgtcacia cgagccaggc tgctgagggg ctgaagaaag tccgcgatca 30600
 gatggatgcg gtgattggcc gccagcaact gatcagcaag ccggtacgtg tacgcaccag 30660
 tagctacggt gatggcgggt gtaatggcgg tggaggctga cacagcggtt cctatggcca 30720
 cggtagggcgt agtgctgaaa gtggtgtgtt ctctggctcg cgcggcaaca ttttcttgct 30780
 tggcgagatt ggtgatgcgg caagaacggt aactgacatc ctgttcggct ggcagaagcc 30840

aatcatcgaa gccgcctccg aaatggagcg tatgcgtgtc atgttgcgcg ggctgaacaa 30900
ggataaggcc aaccctggaa aagccgccgc agaggatatg cagtacatcg tggatatggc 30960
gcaaaacgcc ccgtttgcga tgcaggcgct gaccgattcc ttcgttaaatt ttcgctcggc 31020
aggtctcgat cctactgacg gatcgctgaa agcactgggtg gactccgttg cacgcttcgg 31080
cggcgatagc gaactgctta aacgtgctgc cgtggctgtc cagcagatgt ccgtaaggg 31140
cgtcgtgtcg atggaagaac tgcgtcagca attaggtgaa gccgttcta acgcatgaa 31200
ggcgatggca gacgctgccg gtatcactat gggggaactg accaaagcag tctccaccgg 31260
tactgtggaa gcgaacagg cgctatcgct gatgttcgtt ggtctgcgtg cggagaacga 31320
aaacgccgcc aaagacatga tgcaaaccta caccgggtgcg ctggcgcaac tgcaaacctc 31380
ctttacgtg ttgccgatc gtgtcggta ggcgggctat ctggattctc tcacaaaggg 31440
gatgaaagag cttgctcca tcatgaacag cgctgaaggc attcgttcg ctaactcgct 31500
gggttcgga ctctccacgg cgatcgacgg ctacgcgag ctggcgagcagg ggctggctaa 31560
aaaccaggag ctggttatca gcctgggcaa agtcgttgcc gcaatgggtg cgttcaagct 31620
gatgcgtgcc gggattgcag gcgtgattgg cactgccggg caaatggta acacatttac 31680
caagatgtcg accgttctcc aggtccgtt caatctgggc gcgacagctg tcacccgctt 31740
taatcgtgcg gctcgtatgg ggctggcccc aatcccatcg ctgatcttcg ctatccgtgg 31800
cgcgattacg gggcttcagg gcgcgtttgc tgggctaact gcgttcattg cagcaaacc 31860
aattggtgca gcgttcaccg tagctaccgt ggctgtggcc ggtcttatca cgtatatgac 31920
catgctccgc agcgaaacgt ccaaagtcgt ggacgagatc cgcaaatcc cggaggcgat 31980
gacggcggcc aagcgtgcgc agatggcagc gcgtgcagcc gagcttgaag agcagatcca 32040
gcgagaccag caggcgctta aaactggcga aagcgtgaac tactactcca cagcggctgg 32100
ccctgtgcc gtgaaggagt ccaaagaggt tgttgaggct cgcctgaaga aaaatcagga 32160
agagtacgaa agaacaaccg gcacgatggc gctgggtgat ggcgagtggtg ccaaaccgct 32220

ggcaaaagaa gctgccgaat cccagattga gaaaatccgg gcagataacc aggtcttctc 32280
 tgcgacgttt gtgaaagccc gtcaggaggc tctggataag atccagaaaa tcaacgacga 32340
 caaatcgctt tcggacgacg agaagaacaa gctgcttgca ccgcttcgcg agaaggtgaa 32400
 caagtcctat ctggaaccgg cacagaagct ggtctacgac ctgtcttctc gtaaaaacgc 32460
 caccgagaag caaattgccc acttcagcga catgctggag aaagcgaaga aagaggggaa 32520
 caccgagcag gttcagaagc tgcagggcag catccgcggg tatcaggagc atcttgaagc 32580
 ttagctcag gagctgactc aggcggagtt cgagcgtgat agcgcggcga aaaccggtaa 32640
 gggcgtaatg tccaaccagg gcaccgttct ggggttgggg acgaccgata aggcgggtca 32700
 gaaagcactg gcgcagtata tgcggaacca gatggactcc gcgacctacc agcgcacact 32760
 gccagacggt acggcgatgc tggacttca aggcaagccg atcatcgggc cgaaacagct 32820
 caaaaccag ctgaacctgc agaaagcctc cagcgccagc tctctggaga aaatgagcga 32880
 cgaggaacgt gctgccgcga tcgccgact gaccaaagcg cgtgagcagg acgcagcagc 32940
 agcggaaaaa gccgggcagc gtactgcaa tgcttctcag cgtgccgcga ggaaggaaga 33000
 aaatgcgcag cgtaagctgg cggccggcta ccagaaagcc ctggataaag ccgatcagct 33060
 tatggggcag atgggggaaa gctcaaaagc gaccgtgtcg ttgaccagt ctctccgcga 33120
 taccacaaa tcgtgaccg aactggcaa cgccgtaccg aatgagtta tcaactagga 33180
 gatgatcgac aaagccaagt cagcctcgc tgacctggcg aacgcgagcg acgactatcg 33240
 cgagatgttc aaccgccgca acgtcgagca gatgatctcc acctgggcgc cggaatccga 33300
 ttccatcatc agcgcgggtt acaagccgtc tcgtgaagag aaggtggccg atttcaacga 33360
 cacctacaac cgtaatctga aagcgtgat ggatttgcgt gaccaggctt ctgatccgaa 33420
 aatcgtggcg ctctacacca agcagattaa ccagctgggtg gcggcaggca acaccgcgt 33480
 catcaaagag acgggtacgg cgacacagaa gctggcgctt gactacgaga atctggccga 33540
 acagctggaa aacagctgga gcaacctgtt cagcaacatg acggatacgc tgaccgactt 33600

cgtcatgaag gggaaactgg acttctccag cctggcagag tccattctcc gcgacatcac 33660
 caacatggtt gtgaagacgc agatcactct acctctcatg aacatgctgg ggatggggac 33720
 gacggcagcg ggcagctctc agagtggcaa tctgcttctt ggtgtcgcgt ctgcggttgc 33780
 caaccagggc gtccggatga atgcggtcaa cggcgataag agcgtgggtg aggcgacgaa 33840
 agagacctcc agctcgggtct ccggtctggg gcagaccact cagcagacga ccagcgcgat 33900
 tggttctgca accaacgcga tcggcaactg ggtaaatgga ctgttcacca gtactgaagc 33960
 caaagacgcg gaaaccaaag cggagaagac gtccatcttc tccatgcaga accttagctc 34020
 tgtcacgggg gcgctttctg ccgcgtttgc tatgctgggc gcaaacaatgt ccggctctgg 34080
 caataagtgg ttgagtttcg gcgctacat tgccctccggg ctggtgtctg cctgggctgg 34140
 tgggtggcttc gataacatcg gatctgggtc ctccggctct aactccggat tcaacaatct 34200
 caccggatcg gcatctgatg gtactggcgg cattccggca atcccgaagt tcgcaaagg 34260
 cggcatttcc gggaaagacg gcgtgggtcc gctgcgtgct taccagaaag gtggcatcgc 34320
 tgactctcca cagctggcgt tatttggcga aggggatatg aacgaagcct acgttctct 34380
 tccggatggg cgttccatcc cggtcacgct caacgcagag ggtgttaaag gcggcggcgt 34440
 ttctcacct gtcagcattg aaatcaacgt caacagcgac ggcaagtgtc cggagaacag 34500
 caattccgaa ggcgcatgga gtcaggctgc gcagcgcatg aaggcgatcg cgcttgaaac 34560
 catcgctcag gagaagcggc caggcgggtc gctcaaccct aactctaac gtaactaacc 34620
 acggctgccc cggaaggggc ggtctcaciaa gcatgtgaga tggaaagact gacttttaac 34680
 tggatatccg actacgagtc ggaaaagacc gtgaagccta acgtgacggt gctgaatttc 34740
 ggtgacgatt acgaacagcg tcaggcaaaa gggcttaatc gcattaaaga agagtggagc 34800
 ctactttta cgcgttctta tgacgtcatc aatgccgtcg atgactttct gacggcacgc 34860
 gcggccgttg agtcgttcta ctggacgaac cctcgaggca aaaagatggt tgtggtgtgc 34920
 gacagccata ctgtgaagcg ttatcagggc tatctcgttc tactgacgac ctccgacaa 34980

atttatgaag gataatttaa cccactagat aagtaggtgc ttatttacta ttatctatag 35040
 gcgctgacag gatgttggcg cctctttatt tcaaggaaga aacgatgggt attaaagctg 35100
 atattcagag ctgtgcgcc tccgcgctca ttgagctgtt cgaactgat atgtcgaaca 35160
 ccacctctgg gggcaagctg ttttccacg ccggtacaaa cgaactgatg gagccagtcg 35220
 ttggcaagg tgtgtctac gaaccgtggc caatcaagge gtcaggcttt gataagactg 35280
 gtcagggtac ttgccgct ccaaaaatcc aggtctcaa cttgccgga accgtctccg 35340
 ctgaagtcca ggcaaatgac tatctggtgg gttgtcgc atccgcaag atgacgtgg 35400
 cgcgtttct cgacgcggcc aactcaaag acggaaatcc gaccgcagat ccgaatcagc 35460
 atttcccg tgagatgtgg ttgtcgagc agaagactct tgaaacccat gaggtgtcg 35520
 agtttgagct gtcgagcgtg ttgatctga tgggcgtgca actgccgtac cgccagatca 35580
 tcaaaaacac ctgccgtgg aaataccgcg gccagagtg cggctatacc ggcccctatt 35640
 tcgacaaaaa caaccagcaa accaccatgt caggcgcgga ttactgcagc aaacgctacg 35700
 actcatgcaa cgcacgccgt aactacttg ccaatggcgt aatccactt ggccgattca 35760
 ttggagcaac acgttatggg taatagagct ttccctgagc ttgggtcgga cattatgcag 35820
 gaaatctatc tgacagccat caaacgctac ccgaacgaag cgtgtggctt tctggtgcgt 35880
 actactggcg agaaatatcg ctcatggaa gcccggaacg tgcggagaa cccggaaaac 35940
 acgtttgtga tgcacgtga cgacattatc gcagcggaag atgcgggaga cgtggttgcc 36000
 atctggcact cccacactga cgaatcagct gatgcgtcag atgccgaccg cgccggatgc 36060
 gaggcaacgg aagtccgtg gctgattctg gctgttcgga agaacgtcga gggcgatgcg 36120
 ccatttcaact tcagtगत gaatgtgat accccagacg gctttgagat gccttatctg 36180
 ggctgaccct atgtttcgg tgtcttcgac tgctggatgc tgtccgcga ctacctgaag 36240
 cgtgagtca acgtcgagct gaatccgaac ccgcacctgc atattccatc gtggtacacg 36300
 ggcgataccg acattctga tcagaactac cgcaatgaag ggcttgttcg tctggcgccg 36360

gggacggaac cccagcgtgg tgacgtcttc ttattcagtc acggaagat gcctgaccac 36420
 tgcgcggtgt acataggaga cggaatgac ctgcaccacc agatcgaccg tctgagctgt 36480
 cgcgcttatt acggtggcat gtaccagaaa cacacgacgc accacctgcg tcacagagac 36540
 ttactcaagg gagatgagac gtgtctgagt tagttcatgt gcaacttggg ggcccgatgg 36600
 ccagacattt cggccgccac tggcatttaa aagtgcgcaa caccaaagag gcgttggatc 36660
 tggcgaagc caatcgccg ggcttaaaag cctggatgaa gcgcaacatg aagacctacg 36720
 acaagtatca catccagatc accaataagc aggggcataa gtggtcgggt gatgagagcg 36780
 agtttcaaat gatggggcag tccgacaaca tcggaagat ccgcatcacg ccggttcctc 36840
 gcggtagcgg cggttaaggct ttgggttggg ttacagacgt cgtaggggca ctcgtcatgg 36900
 ttgcctcatt ctggtttccc gcgctggccc cgctcggctt gtcgctaag atggggggta 36960
 ttgcgagtt aatttcgcc caggcgacca atgacagtgt aaggcaggca gataactcga 37020
 actcgtttta ttgcacgga ccacaaaaca ccactaacca gggcaaccgc gttcagctca 37080
 ttatggtga ggaaattctg gtcggctcac aggtagtaag ttctcgatc accatcgacc 37140
 agcttttagta agaagggaaa ttttgaaca tggaacagtt caagaagaag agactgcctc 37200
 tcctgattgc aggtgctggc ggtaagaaaa gcagtggctc cagccgcaca ccggttgaag 37260
 ccgacgatac cgtaaacctg cgtgctatgg cgtccatcct cgacctgctc ggggaaggtg 37320
 tcattggcgg gctggtggat ggtgcaaagt cgatcttctg tgatgatctg ccaatcctta 37380
 acgaagacgg gtcttcaaac tttagcggtg tcacctggga ctcccgcat gggtcacaag 37440
 accagacgcc gatggctggg ttgatttcg ttgaaacgcc gaagtcagtc aacatccagt 37500
 tgaaaagaat gcacgacgtt acgattgcca tcgataacga tgaggcagac cgtgtccgcg 37560
 tcattctgaa gtccccgtct ctgcgtagca tcgacaaaaa gaccggtgat accaacggtg 37620
 cgaccgtgaa gtacaaattc cagattgcca atggcgataa tgccttcaag gacgccatcg 37680
 cagaagggga gagtgcctcc gaaattgcgc tgacggcaaa aaagacaggc gtctactacc 37740

gcagctatga gctaaaactg cccaagccag gtcgtgccta caaggctcgc gtgctgcgtc 37800
 tgaccgatga cagcaatact cagtacatct ttaacgatac gtgggtggac tctatcggtg 37860
 agatcgtcga tacgccgatg aactatccga actccgcgct ggttggcctc aaggtaact 37920
 cagagcagtt cggcagctcg atcccgctc gttcgtatct ggtgcgtggc ctgaagatcc 37980
 gcgtaccgtc caactacgat gaacacacaa acacctatat cggcgtatgg gatggcacat 38040
 tcaagctgtt gtcacttcc aacctgcct ggattctctt cgacctgctt accaacgctc 38100
 gttatggcct ggggcagtac gttctgagt ccatgattga cctcgggcag atctaccaga 38160
 ttggtcgcta ctgtgacgaa gaaattgaca atggattcgg gggcaaagag aagcgcttcg 38220
 ctatcaacac ccagatcact agccgtcagg acgcgtaccg actgattcag gatatcgctg 38280
 gcgccttcg cggatggtc ttctgggctg gtggcatggt taacgtcatg caggatagtc 38340
 cgtcagatcc ggtcatgatg ttaccaacg cgaacgtcaa agacggcatg ttcagctaca 38400
 agggatctgc gcgtaaagac cgtccgtcag tagctcttgt gacctacaac aacaaggaag 38460
 acggctacaa gcagaacatc gagtacgtcg aagaccagga ggcatgcgt cgttatggcg 38520
 agcgtaaaac cgaagtgggt gcgttcggct gtacaagccg tggccaggcg catcgtgtcg 38580
 gtctgtggct gctgtatacc gcacgcatgg agtcggacgt ttcagcttt acggcagggc 38640
 ttgatgttc ctctctatg ccgggtgaaa cgggtctgat tcagaacaaa taccgtgctg 38700
 gtaaacgcaa ctctggccgc attgtggcgt tcacaaagaa cagcatcact ctcgacgcac 38760
 cggttacgct gaataaagcc ggtagctaca tccggatctt gaatcaggaa ggcgaaatcg 38820
 ttgagcgca tattcttgag accggggaag acattaccaa agtgacctc tccaaagcgc 38880
 tcaattccgg tgatatgccg gtgatgaatg gcgtctggac gattaccgag ccagatctgg 38940
 agccaatgcg cgtgcgtgtt atcaacgttg cccagggcga ggctcagggg acgtttaacg 39000
 ttacggttgt ccagaataat gcatcgaagt acgaagccat cgacaacggt gcgacgtga 39060
 tccccgagaa caacacagtt ctcgaccga cttattcgaa gccgactaac ctgcaggtga 39120

cggaagggac gtatatctcc agtccgggta acctctcaat caagctcgta gccacctggg 39180
 agggtaagtc tgcggaatat tggatcagct ggcgctggtc cgatgaaaac aacgtttcta 39240
 actggcagtc cgcacgcgtt accgaagagc agttcgagat cctcaatatt gctgagaatg 39300
 gtcaatacga cattcagctc tatgcggttt cgttcagcgg caagaaaacg gacatcatca 39360
 gcaccgttta tcaggtgaaa ggtacgatga cgccgccagg ctctctacc tctctgacgg 39420
 ccgttggtga ctaccgaac gtgattctga atgggtcaa cccggactca atcgacctg 39480
 atcacatcaa cgtgtatgcc tcccagacca acgatctgga aacggcgaag ttggtgcag 39540
 aggccgccag caccacgttc actcatgccg gtctgggaga tagtgagacc tggactatt 39600
 gggttcgcgc ggtgaacaag cgtggcatgt taagtccgcc gaactccaat ctgggtacgg 39660
 aagcgatgac gcgagacgtc ctctcgttcc ttaccgggaa gatcacctct tccgagctgg 39720
 ggcaggagct gctggaggaa atcgacgcta aagcctctca ggatgcggtc gacgccatca 39780
 acaaacagat ggaagagagt ctgaaagagc ttgatcagtc cgttgccgat ctggacagca 39840
 aactggaaga caccagcggc cggcttgagc aggtgcagaa cgacctcaaa aatgaagtct 39900
 ctggcacgct ggacaaggtc aacgacgcgc tgcaacaagt tgaggactct aatgcggctc 39960
 tggctgagtt gcaggaaacc gtttccgagc agggcaaagc catagctggc gctgtggaag 40020
 cggcgcacgc tgcgtcgac aacgcctccg cgctgattgc tgaagagcgt gaagcccgtg 40080
 tcgaaggtga taaggcaaat gccaaacaga ttgaggcaat gaaatcctcc gtcgatgaca 40140
 gtgttgccgc cgtcgaagag atgaaaaaga ccgttgccga agtcgaacgc gccagcgcgg 40200
 aagcgtcgac caatatcgag gctctggcca aaaccaatat tgacctgct ctgcgtcagg 40260
 atgaagacca gcacaagcag atggtcaata atgcgaagat cgcaaccact cagaagacgt 40320
 ttgccgacga tatgtctgca atggcctcaa aagtggaaga aatccgcgca gaaattggtg 40380
 aggacatccg ggcgctgatt ctggaagaga caacggctcg cgtagaggct gacaagacaa 40440
 ttgcgacgca tatctcaag ctggaagccc agtcaacga cgatatttca gcggaatcg 40500

ttccgagca agaggcgct ggcactgcgg atgaaacgt ttctcgtcag atcaccacgt 40560
 tgcaggcgaa agttgaaggt gatatcagcg ctgcacttac tgaagagcag attgcccag 40620
 ccacagcgga tgaggcgcta tcgaagcaaa ttaccaact gaaggcacag aatggtgagg 40680
 atatcaaagc cgccgttgca gaagagaccc aggctcgaac cgatgcagat ggtgctctgg 40740
 ctctgcagat cagctcgtg aaggctcaga cggcagagga catcaaggcc gctgtcgaca 40800
 cagagacgaa agcgcgctacc gatgccgact ctgctctggc cgggcagatc accaatctcc 40860
 aggctcagac cggcaaagat atcaacgctg ctatcacatc cgaagccacc gcgcgtgcaa 40920
 acgctgacgg tgctctcgtt aagagaattg atacggttaa ggctgaagtt gatggcaact 40980
 cggctctcat tcagcagcaa gcgaaggcga ttgccgatac cgataagaag gtttctgctg 41040
 cctggacgct gaagatggaa acatctacca gcggcgggca gaagtacgtt gcaggtatcg 41100
 cgctgggtat cgacagtacc ggtttatcac aatttttggg gcaggcagac cgttttggcc 41160
 tggtaactc cgtaaaggcg aagatcacta cgccatttgt catcgaaaac agcgtggcgt 41220
 atatgaacgg cgcttatatc aaagacggca caattacgaa cgccaaaatt ggtaatgta 41280
 ttcagtcgaa cgattacgcc gcaggcagta gaggctggat tatcccaaaa gatggtagcc 41340
 ctgagttcaa caacggtacg ttcaggggaa atattgctgc aaactccggc acgctgaata 41400
 acgtcacat cgcgcgaaac tgccagatc tggggaaact gcacgcgaac cagattgatg 41460
 gcgatattgt taaagcctac atggttaatg gcagcagtat ttatattgca cctcaaakat 41520
 tcgccagaat tatctatgtg gtaaatggtt actactataa caagccatcg gaggatatta 41580
 acacctactc atggtcaaga attaccgagt atacggtaaa tggagtgaag cagcagatat 41640
 atggaatgag agaaggctct aaaaatcaat ctggcttgtt tggttattac aattgcccgg 41700
 caggtcagtc tgcgactgtt gatgtttata cctggcatag acagcgtaaa tacgatcacc 41760
 gcgtgaatga acctatctc attctggtgt ttaaggctta aaaatggaga aggatattat 41820
 ggacgaaacc cctgtcatct ctgctgtaag gaacgcagtg cgcagtctta gtggcggtat 41880

ctcttgtag attcaattg atggccttgt tatggacgat ggtgtaaccc ctttgtttt 41940
 gccatacacg ttgtcggaag gtgacacatc accttggcc aagaaaatac tggaggctct 42000
 ggagtcggaa tccagtgggt gtatcgctcc gtaccccgaa caaggcgagt acatcgaaag 42060
 attgaaagt gagaaactgg cagtaattaa tgactggcgt ctctgcagg agtgcgcac 42120
 cgtttatttc gaatggaacg gccaccgctg ggacgcgaat gacattcca aagaacgtt 42180
 ggatatctcg cttaaagcag cggaaagcgg tctccctgac aatttcttct ggaccgatgc 42240
 ggataataac gatgttcgg taacgcagga gcaactgaag gaattaggga tgagaatgac 42300
 ccagacgtt ttcgaccgca agttcggcgc ccacgaacga cagagggtga tgaaaaaaga 42360
 cattctggag atgtgtgatc ctgagctaata caaaaattat caggtcgggt ggggggatgg 42420
 ctctgctcgg cggtagacat ctttctttat atcggtaaaa ataagtaagt gattacctat 42480
 ggcgagcagg gatgcccgc tttacaagga gcgaatatgt ggtacaggga aggtactatc 42540
 acatttacac aggggaagtga cgcactttct ggactggca cgtactggaa tgtgaccgcc 42600
 aacggcgttc tgccgggcat gatcgatc gcacctgaca acaagttgta cgaaattaag 42660
 cgcgtaatta gcgacacaag tctgattctc gcagagccgt acacagggga gaccagaag 42720
 gaagttccgt gccgcatcat cacaacctat gagggcgact taacgcagtt cagcgcacgt 42780
 tttaccgctc ttatgaccg tatgtcagcc gactcgaaga cgatgcgcag ctggtgacg 42840
 gcagttgatg aggtaacgt tgagcgtgaa gacggtagc aagtaccgt gaagtcgctg 42900
 acgcagatcg tcgatgagca caacgcaaac cagaaatgg atacggataa tgcagacgct 42960
 attaatgcgg caggcgagaa ggctcgtgag gccgctgagc gcgcattagc tgcggcgcaa 43020
 agctcttcag aagcaagagc aaaagcagat gaagccgctc aaagttcagc ttcagcatct 43080
 gagtataaaa ctgcggcaga gctaagtgc gctgcatcaa aagcatcgga gcacggcgcg 43140
 gcagaaagcg cagcttcac gaaggcaagt gcctctcgg ctaaacatc tgaagataat 43200
 tctgccgct cagagaccaa tgcggctgaa agcaaggctg ctgcggcatt aagtgcgtct 43260

tcttcggcaa atagcgcctc agaagcattg caatacgcgg agtcagccaa gacctctaaa 43320
gaggctgctg ctgcttcaga agcagcggca gccaatagtg aaaatgaagc cagaacctca 43380
aaagataccg ctgtagcggc tgcggcagag gcatcagcta atgccacatc agctgatgcc 43440
tccagacatg atgtcgatac caataaagcc gaagtatcga gaatgaaaga tgaagttttc 43500
gctgctaggg actcaacgat tcagtatagc gaagaggcta aaacagcggc tgatacagcg 43560
gcaagagaag cagccacgaa aacatctgat cagctcctgt cggcggtaa atcagaggcg 43620
gaaaaggcaa acagtgctag cgcaagtgtc caaggtttg ccgatgacgc caagcgattt 43680
agagacgaag ctcaggaaat agctgaaggc agcaaggtaa acgatgcaac aacctcacag 43740
caggggggtg ttcagttgag tagtgcaact gatagcgaga gtgaaactct tgcctctaca 43800
ccaaaagctg tgaaaacagt catggatgcc gttgctctaa aggctctat agatagcccc 43860
gcgctatctg gcgaccaac agctccaact ccggcaatta ctgctgctgg acgtgagatc 43920
gcgacagccg cgtttggtgc ttcaaaagta gcacaacttg ttggctcagc gcctgaagca 43980
ctggatacgt taaatgagct ggctgctgcg ttaggcaatg atccaaactt tgctacgact 44040
attacgaaca tgttggttag aaagcagcct ttggatggaa cactaactgc gctttctggt 44100
cgttcacctc aaggggtaat tgattatctt ggcttggtga atacggtaa cctggcggct 44160
ggctcaatc agaaatccca gaatggggca gatattctg acaaaagatt attttgaaa 44220
aatatagtg cagttagctc cgccagaatt tcgtttgta aggaatccgg gtggtataag 44280
ttagcgacag taacaatgcc tcaaggagct tcaaccgctt taattactct tattggaggt 44340
gctggataca acgcggggct ttatgaccag gcagcgataa gcgaaatagt gttgcgatca 44400
gggaactgga atcctgttgg catcacagca acattatggc aacgctcacc agcaggtgct 44460
caaggggtgg cgtggataaa tacatcagga gatgtttacg atatttatgt aaacgttgga 44520
cagtactcta ttgatgttat tgctctgagc gattgtacaa ataatgcaag catagtgttg 44580
ttcggcacac cagagtatgt ggcgacaaa cctgcaagtt ccacgaacgg cgcaaattat 44640

atattgtaca gtagtgttct accaccgcct gtagtcatatc cagtaggtgc ccctattccg 44700
 tggccgaacg atgtggcccc gtctggttc gccatcatgc aagggcagac gttgacaag 44760
 agtgtgtatc cgaagctggc ggccgcatac ccatcaggtg tgttacctga catgcgtgga 44820
 tggatgatta agggtaaacc aacttctcgt gcagtgttgt cactggagca agatggaatt 44880
 aagtcacatg cgcacaatgc agccgcttcc agtacagatc ttgtacaaa accaaccaca 44940
 acatttgatt acgggacaaa aacgtccagt ggcttcgatt atggaacgaa atcgtctaac 45000
 agcactggtg ctcatgcaca ctgctgtct ggctctacat cgagttcagg tgcccatgcg 45060
 catacggtaa ctgctcatac tcagtatcca agatctacag attcgaggaa ccagaatgct 45120
 gtcggtaagc aatacaacac acagcagact acagccaatg cttcaatgt ctggacaagt 45180
 agtgcaggtg atcatgccc ctcaatctcc ggtactgctg tcagtgccgg tgctcatgcc 45240
 cataccgttg gtattggcgc acatgctcac tcattgagta ttggtacaca ctgcattca 45300
 gtggcaattg gggcgcactc acacactatc actattgccg cttgtggtaa tgcggagaac 45360
 accgtgaaaa acattgcata taactacata gtgagactcg catgattata ttagttttt 45420
 cggcacctgt tgcagaaatg gctgatgctt gtacatgtga atttgatat agcgaaaatg 45480
 tcgagataat ttacaggtcg ctggaagcga gcgctgagtt tgactgcatt gtcagtgcta 45540
 cgaacagttt ggtcaggtgg atgggagcgc gaatgctgaa tatatcgggc aaggttttta 45600
 ccaatagttt gtgaggcttt tggttggcgt gcatacgtc cgagacatca ggggacaatt 45660
 ctaatgcgca ttctttaaa tctgtatcgt taaaggagtt gacgaaatga cttcaaaaat 45720
 gactgataaa gcgagaactc tcaaagtga caatctgctg gaggggacaa atgaatatat 45780
 cggagtigga gatgcctata tcccaccgtt tactgggtta ccggccaact gcactgagat 45840
 tgaaccaccg acgactacgg aagggttgc cgcagtttt gacttcacaa agcaagagtg 45900
 gagccttgaa gaagatcatc gtggcaaac gctttacagc acagaaaccg gtgaaccggt 45960
 gttcatcgct gaacttgccc cgttgcccgaa aatgtaacc tacatctctc caaacgggga 46020

ataccagaaa tgggatgggt ctgcttgggt taaagacgaa gaagcagaga agactgccct 46080
 tgtcgggtgaa gccgagcaga ataaatcggt gctgatgaag aacgtcagcc aacaaatttc 46140
 cttgcttcaa gatgcgattg atctggatat ggcaactgat gaagaaaagg aaacactggt 46200
 tgcgttgaaa aagtaccgtg tcttgcttaa ccgagttgat acttcgttgg ctccagatat 46260
 tgactggccg atattgggaa acgaggaaga agattcggca aatttgatta aataaagtag 46320
 gtaggtagtt atttatataa tgtgatataa atatgccatc ccgatttgac tattcatcag 46380
 ggtgtcaacg acggatgaaa agtgatccac ttatatctcc accaacggcc caatattgat 46440
 ccaccgtttt actcaggatt agcttctgct ataaccccg ctttcgttt ctgtctgagt 46500
 cgatagcttt ctcccttgat ttgaacgaca tgtgagtgggt gtaagatacg gtccagcatc 46560
 gctgaggtea gtgctgcac accggcgaaac gtttgatccc actgcccga cggcagattg 46620
 gatgtcagga tcattgcgct ctttcgttaa cgtttagcga tgacctggaa gaacagcttt 46680
 gcttcttct gactgaacgg cagatagcct atttcatcaa tgatgagcag gcggggggcc 46740
 attactccac gctgaagcgt cgtttataa cggccctgac gttgtgccgt agataactga 46800
 agtaacagat ctgctgctgt tgtgaagcga actttgatac ctgcacggac tgcttcatag 46860
 cccatcgcta ttgccagatg gggtttcccc acacctgatg gccccagtaa tacgatattt 46920
 tcattacgtt ctatgaagct gagtgagcgt aacgactgga gttgcttctg cgggtgctccg 46980
 gtggcgaatg tgaagtcata ctcttgaac gtttcaccg ccgggaaggc tgccattcgg 47040
 gtatacatcg cctgtttacg ttgatgacgt gccagtttt cttcatgaag cagatgctcc 47100
 aggaagtcca tataactcca ttctgggtct actgcctgtt gtgacagcgc aggcgctgcg 47160
 cttataaggc ttccagttg caactgcccg gcgagcgcca tcagtcgttg atgttgacgt 47220
 tccatcatca cgccactcct ctgcagaatg agtcgtagat ggagagtgga tgatgcaggg 47280
 ggtgtttgtc gaagttcacc agatttcat caagatgcac gtcatactct ttttctccg 47340
 gaggcagtgc cagcatggac tgctgctctt cgagccagcg atcgcaggga cgggcctgga 47400

ttgtttcatg ctttcgttgg ttagcgacat cgtgcagcca gcgcagaccg tggcggttgg 47460
 ctgtttcaac atcgacagtg atcccatcg ggccgaggcg agtcattagt gggatgtaaa 47520
 aactgttacg ggtgtactgc accatccgtt ccaccttacc tttagtctgt gccctgaagg 47580
 ggcgacacag tcggggagag aagcccatct ccttgccgaa ctgccacagc gaaggatgga 47640
 accggtgctg accggtctga tatgcgtcac gttgcagaac cacagtttc atattgtcat 47700
 acaacacttc gcgcggcaca ccaccaaaga agcggaacgc attacgatgg caggtctcca 47760
 gcgtgtcata acgcatattg tcagtgaatt cgatgtacag cattcggctg tatccgagaa 47820
 cagcaacgaa cacgtgaagc ggtgagcgac cattacgcat agtgcccag tcaacctgca 47880
 tctgtcgtcc gggttcagtt tcgaaccgaa cggcaggctc ctgctcctga ggaaccgaga 47940
 gagaacgaat gaatgccctg agaatggtca ttccgccacg atatccctgg tctctgatct 48000
 cgcgagcgat taccgttgcc gggattttgt aaggatgagc atcggcgatg cgttgacgaa 48060
 tataatcccg gtattcatcc aggagtgaag caacagcagg tcgcggcgta tatttggcg 48120
 gctcagattt tgcctgcaaa taacgtttaa cggatttgcg ggagatcccc agttctctgg 48180
 caatgccccg gctactcatt ccctgcttgt gcaggatttt aatttcata actgtctcaa 48240
 aagtgacat aaactctcct gaatcaggag agcagactac cccctggatc tgatttcagg 48300
 cgttgggtgt ggatcactat tgcaccgttc gttacagcaa cgagtgattc gacagcagta 48360
 acggccgcgt tcccggtcag ttgcgcgcc gccagcttct ccagcagctc tactaccttc 48420
 tggtcgctgg gtacggacgt atcgagtggc tcggccactt tgtacttctt cacaccgaat 48480
 cgaatgaatg ggttgagcat tagcgagacc atgctctgct caaattcatc aaggttggcc 48540
 aggcctctt tcttggcgtt ggttcccatc gttttatgg catccagctt gtgctttagg 48600
 gcgatcagtt ttccattag tgttaacct ccatcggtcg ctcgaggagt ttcatgtgtt 48660
 ttcttgggtt gcttcttcaa tgagtgccgc gtacacgtca gtgacgggcg ccagtgaatc 48720
 ggtggacgtg gtttgggtt tggctggctc tgtttcttc gtgcgttaa ccagactgtt 48780

aatcgtcatg gtgttgcgct tccgggtgag cattctggca tggctgtttt gctcttcac 48840
ttctttgata agcgcagtca tatcgatgaa gtagagctgt tcgcctttgc ggatctcttc 48900
gaccatcatc ttcagcgcct ggcatttgcc agcagcaatg gccgcagcgc aggacaggaa 48960
cgatgtagct gggagacgct tctctttgta ggcgaggatg gtgtgctggc agactgtata 49020
gctgcaatgg gcctcatggc cgttgatctt cacttccgga cagcacagcg aataaccgtt 49080
gtttccggag atagacggga ttttcgacaa atctgttctt gtggacatgc ttctaaccgt 49140
agtcgtgtac ttacttattg agcgcagttt aaaaaagccc caccagggggg ctaaattggtt 49200
tatcgaggct taccaggctg cccagccagt catttgtcc tgggcggctt cgaaccgta 49260
tggctccagt aaatcgttgg catggtggac ggcgtaggat ttgcctcct gttaaatcat 49320
cggcagctcg ttggccaggc gtgccacttg cctgcaaaa ccggctagca caccgtcaca 49380
tgctgaccc gcatcgacaa tgatacgcac caggtctaag tcgctgcggc acatatcgca 49440
gatgatccg tattccacct cacgaatcg ctaacggct ttttggtgt cgccactgac 49500
caccaattcc agcaaaccag gtgggggtgt cagatctgta acgcgctcgg taacttcagg 49560
cagttcgaca atgctcagga acgccgcgat tgacgggtca tctctacac cagecctgcc 49620
tttgatcgcg cgaagagtcg cgtcgacaat atcctcaaac cgttcacctt catcgcacac 49680
cgcctgattg gtgtagacaa cgcggccgct gtaccatgct ccagcacgta cttctaccgt 49740
tgcattcttc atctcgcgag tgaacgtcac aagtgccgcg cgtttctgtt taacaccagg 49800
cagctccgga gactctcaa aacgaacca gacccgcatg tatttcgacc cttccgaaag 49860
aggtgcggtg ctcacagacg tggcgatgtg ttcagcgca gtctggatcg cctcaccgat 49920
aatcttctgg cgctctctg tatcaatttc tacgcctgat ttgtcgatga ttccgtaac 49980
ggacttctga atatctgctt tcataaagg tctcaattc cttcgtcgcg catattctta 50040
cagaaaatta agtaagtatc tacttatcga ttaggttca ggaaaatcca tagtcattg 50100
cattacaagt tcaaatattg accaaccctg attcgacaag tgctacctta tcggtttata 50160

tgctatgggg cattgttacg cgtaaagtag tagcctgagc catgtctttt tctataaact 50220
 ccatgataga aaccatctta ccttgctgga ttatgtatgc ctgagaaaat ctttaaagcg 50280
 ccttgcccta catgtagagg gacatgcaat acgtaggttc atggtgaaat acaaaaagag 50340
 tggagtaatg cggtagacag ttttaattta tcatatgggc aagatagtca taagcttctg 50400
 gaatgttgcg ggtgtggcac tgttttttac tataaggact catggggtag tgagcatggt 50460
 gataatgata ttacggaaa attcaccctt acacatttta ttgaaacagt ccctgcgcca 50520
 gagcaaccaa aactaaagcc agactggttg ttgaaattt acaaaaaaga tcaaatccta 50580
 tttttattc ttgatgaagt atatacagca tatgaacacg gatcggttcat actcgctct 50640
 acagggctac gcacggcatt tgatcactca tgcgctcata ttggcatacc taatgcctac 50700
 acaatggaac aaaaagtcaa agatgtttt gtgaaaggtt atgtgagcga aaccgaacga 50760
 gatcaactca gaattgttat agaagctggt aacgctgccg cacatagggg atggagacct 50820
 gacaaatctg ctttgagtc actattacat gttgctgaaa aattcattca gcaagtata 50880
 ctaagagacc ttgatagata aaaaatcggc gaaaagatac caaagaagca aaagaaaaa 50940
 ggagactgta aacaatattg tgtaattgcc tgttttgat atcttcactc caacaacgga 51000
 gacaggcaaa ttatggacga aaagaaactt aaagcacttg cggctgaact ggctaaaggt 51060
 cttaaaaccg aagccgacct taatgcattt tctcgtagc taacaaagct taccgtcgaa 51120
 acagcgtaa atgcagagct taccgaacac ctcgggcacg agaaaaatac ccctaaatca 51180
 ggctcgaata cccgcaacgg ctattcgtec aaaacactgc tatgcgacga cggcgaaatc 51240
 gagctgaata cgccacgca cgcgaaaac accttgaac cgcagctgat aaagaaaaat 51300
 cagacgcgta tcacacagat ggacagccag atttgtccc tgtacgcaa aggcattgacc 51360
 acccgcgaaa tcgtcgccac cttcaagag atgtatgacg ccgatgtgtc tcccacgctg 51420
 atatctaaag tcaccgatgc cgtaaaagag caggttgctg aatggcaaaa ccgccaactg 51480
 gatgctctgt atccattgt ttatatggac tgcattgtcg taaaagtccg ccagaacggt 51540

agcgtgataa acaaagcagt gttcctagcg ctgggcatca acactgaagg tcagaaagag 51600
 ctgctgggca tgtggctggc agaaaatgaa ggtgcgaagt tctggctaag tgtgctgaca 51660
 gagctgaaaa atcgcggtct tcaggacatt ctgattgcct gcgtggatgg cctgaagggg 51720
 ttcccggatg cgataaacag tgtttatccg cagactcaca tccagctgtg catcatccat 51780
 atggtacgca acagcctgaa atatgtgtca tggaaggact ataaagccgt caccagcgg 51840
 ttgaaaatgg tgtatcaggc tccgacagaa gaggcggcgc tgatggcgct ggataagttt 51900
 gcggaggcct gggacgaca ataccgcaa attagcaaaa gttggcgtag gcactgggaa 51960
 aatctcaata cattcttcgg ctatccgcc gatatccgca aggctatcta caccacgaat 52020
 gccatcgaat cgggtgaacag cgtgatccgt gcagccatta aaaagcgcaa agtgttccc 52080
 acagacgact cagtgcggaa ggtgtttat ttggcgatca aggatgcac aaaaaatgg 52140
 agtatgccga tccagaactg gcggttagcg atgagccgtt ttattatcga gttcggtag 52200
 cgcctgagcg atcacctta atacggtggc agttacacag aattatggac aggctctgtt 52260
 tttgccaca cgtaaactg aaattgaaaa ctatcttgc ccagatctaa taagagatga 52320
 gacaggggtt caggttttt tcacagacac atgcgacgca aaaaaacat aggaagggca 52380
 accagcacga aacctaacga cgtactggac aggttctggc ccttaatgac tgccgaaaaa 52440
 atcataaaat gctctactta tagagatgat aataatgaca aaattgagct tatagacatt 52500
 ctgaaggca ttgttcatt agtcgattga tcgtgaccta cgttgcatag cggtgtgtca 52560
 gttaagcctc tgtgtaacgt tattgtgctc aaaaaatgag cttaacgaat ggaagggact 52620
 tcccctgatt atgaacctga ttaactcttg tgcaatcatg ggataaata cactccggag 52680
 ggattcgta tgaccatcac tactgtcgg atcgatcttg ctaaaaacgt gttcgtgtt 52740
 cactgcgttg atcagaatgg taaaacggt ctggttaagc ccaaagtatc gcgtgctgca 52800
 ctctctgagc tgattgcagg ttacctccc tgtgttatcg ggatggaggc atgctccggg 52860
 gcgcactact gggcgaggct gtttcgagag tatggtcatg aaccgcgcct gatggctgca 52920

aagtttgat cgccttacca catggccggt aaatcaggaa agaagatgc tgccgatgct 52980
caggctatct gtgaggctgt ccgtcgccg catatgcggt ttgtgccagt gaaggacgaa 53040
agccagcagg ctatgcagtg ttacatcgt acccgacagg gttttatcga agagaaaaca 53100
gcaacgtata atgcctgag aggattgatc tctgaattg gcgtcatgc cccgcagagt 53160
actgatgcct tacgccgat gggttctgag cagaagaatt cttaccgtt ccagggtcag 53220
caatgtattg atgattgct ggagcacgt gatcgattg aagccaacat tctgactat 53280
gaccgaattt tgcctcgat ggccaaaaca gatcaccgca gtcagcgact gatggagctg 53340
aaggagttg gcccacaac ggctgtgcg ctggcgcca gtatcggtta tgcacatgat 53400
ttaagaatg ggctcaact ggccgctgg ctggggctca cgccttcaca gtacagcagc 53460
ggcggaaaat caaagcttg caggataacg aaagctggcg attcgatct gcgaacctg 53520
ctgggtcagg gggcccgtt agttctgatt ggctgata aaaggactga ttcttcagt 53580
cgttgggtt gtacgtggt tgaacgcaga ggatactggc gtgctgtgt tgccatgcc 53640
gccaaaaacg caaggctgtg ctgggcatca ttgcattacg gtgatgatt ccggctgtac 53700
tcagccagct aaagcactaa gtagtataac catctgacct gcaactcgt gatgataaag 53760
ggttagacct cgtgaggcct atctggctat tctacaggat atacgtatcc gcttaacgaa 53820
caagaacctc acgcgcgtt ttatcaggg ccgaatcga tgacgattca tcatggcgt 53880
ttatagtacc gcagtcttc cctttattt ttactgaaga gcagacagaa acctgaata 53940
ccgacgtga catgccggg aagccctat agtacaataa tttcgatat ccaaactgac 54000
cccaacttca agttgcctt tctgttacc gagtgaatt ctttctcga tgcccttc 54060
gataacctt tgtcaagct gttgtcgat ggtcatgagt gcgttccat gtcggtcac 54120
acgtgtgcc agtgcgcaa caaaggctt ggagtcagca gactcgccg cctgtaataa 54180
atagtgtatc agcccatc cctgcggtga agacagataa tctgcatca gcaacgtac 54240
cagtctgcc gtcagggtg ctatcacg ttaagaaggt ttgcttgc gccagcgga 54300

ggctatagg gtcaccacca aagcacgcca gagtgtgaa gtatgccta acctattgaa 54360
 tcagaatfff aatccactgg gaattaacca ggtgtgggtg agcgatatca cctatcgtgt 54420
 gcccgaggtt cagggcgagc atggacgctc aatgaacca cgagtctgtc tggaatattg 54480
 aaccggtaac tcacgatgag aaaccaaca atctaccgg gtgtgacggt ggagaacctg 54540
 agcggcagtg acctgcggca tgcccgagg gtgatgtaac ccgtgacaa cggggattga 54600
 ggcgagatca ctaagccgag atgacctca aggttaagt ctgaaaggct gaagaacatg 54660
 aaccggtta tccgcctctg tgggttgaat atgtaccac ggcctatgtg atctgacagg 54720
 ccgtgcagaa ggcaccgaca ttgatagata tgcagtgtg gtcgaaagt tttgacatg 54780
 taagcagaac accgggacag caacgtctat cacgctcgcg ttgctgactt ctgccaactt 54840
 gcggcaagca aggacaaaga gtgcgacggg cagcctcctc agtatgtctg agtccaggca 54900
 ggtgaaccgg ggaaggtcag cgacggatgt taagggggca tggctccgat gacgcgctgg 54960
 ctggcggagc ttccatagta gtccgcgatg gggaaagccc attacatggc gaagggaagc 55020
 agtttaaatg tgtttgcgac gtgaattaac tgacctaat aggtgaagac ctttgataat 55080
 cagcgaaatg caacgcaagc ttgccacatg ggcagccacc gaccgcccc gacgggttga 55140
 acggctgctg cgtctgataa cacaaccaga atggctggct gaagcggcgc ggatcacact 55200
 tgcatcaaag gggggcgata ccccggcgt tgatggtgtg aaaaaaaca cgctacaggc 55260
 cagactggct gctgagctac aaatactcag ggatgaactt ctcttggtt gttaccaacc 55320
 tctgccagcc agacggggtt atatcccaa aagcaacggc aaacagcgac cgctgggtat 55380
 cccacgctg cgggatcgta ttgtcagcg ggccatgctg atggcgatgg agcctatatg 55440
 ggagagtgat ttcatatc tgcatatgg ctccggcct gaacgcagcg tccatcatgc 55500
 gatcagctca ccgattgtgg ggaaacacga gggcgctggg taattgaagg cgacctgtcg 55560
 ttaacttga ccagaacagt ccagtatggt cgttattaga aagtcactt cgctaagaag 55620
 acttggggcg catggcacat gcgtaaaata tctcgacgc tacctaaac gaccaccgat 55680

gtcggcgtca aaactgcgac gaaacagaga tgataacat catgattatt agcatgatgg 55740
tttatgtgat ttatgactga ttattactta ctagtgtatt ctagtcatca atttgggctt 55800
aattttggaa atgcatgtgg gctagaatat ttccacaatg gttcccagta agatttcatt 55860
aattcattaa ctgcatcttt tccttcgact aaatagtcac actctgacag ataaccggga 55920
taaagattat ctgatccaac aacgtacaac tcatcgtaac taatcattaa ttggcggtga 55980
ttaccaggtg caacagggac ttaggatag aaaagtccac tacctttaat tgctgacatt 56040
agtgcactac caataatacc ttgatgcggg gggttttccg aaagtgggtt ttgcttaagt 56100
gttgacgtat aagcgcttg ttctaaatca ggccactgt aggtttcgcc ttcaattgta 56160
tttcatcag gtactttatc tgtaaagaag aatgggtgcaa tcaatattct ttttaaggca 56220
tcagcacggc taccatcagg atcgtctaact acttcacgg tatcaatc atgggtagg 56280
taatacttaa ataattcata ggtccgttct gctccagaac caaatgagta ctgacacca 56340
gcagctccag ctgctgcac tagagcagag actacaacat gaatatgaag atctttattt 56400
tctaacaaag cctcaataat ccaattacac gtaaagtgg ctttcattt tttttccaa 56460
gcactcacga gatcttgctg tgaaattcta attatgcgt tagcattttt taccagttgc 56520
tcttcatta ttcagaccc tcttggttag tcatgctca tattaggtcc tgtccaatat 56580
ttacctactg ataaaactct gctgctttt ttactctt ccatgtttc gtattcacta 56640
atagagtcg ctacctctg attaaagttt tcatgcaagt tgagtaggtc ctcttgccgt 56700
tgcttcatat aattcatagc aactgagctt ttaagcggat cttcaggctt atcatagaac 56760
ttgttccga ccgcccacat catgctttca taatcaaaat attcttttt tagtaaatct 56820
gaattacatg accatagttc gtaagatat agctgggagc cataagcaga agaaccatga 56880
gtgataattg atacatcatg aacagggtgga taatttctaa atagatccat gttcatgtta 56940
tgtccaccaa caagagcttc agtaccatct gaggccatta ttttgtgtg attccatgtc 57000
attcttgat cggtgattgg tgggaaatca ggatacacgt ttctcataaa tgatgtagcc 57060

aacccttctt ctattctaaa gaaacggcct agccaaattt caggcatttt ttccaatat 57120
tgtcctcgct ccttaattag ctgaattaac tctgatttaa aagcaacaaa gtcaggggag 57180
ccatttggtg cagcagataa cccattcata aatactgttg gagattggcc gaaaagaaac 57240
ctatactgag ttggctgagt tcgccccatt ttttcgata aggattcacc aatggcctta 57300
aaaatcactt ttgccactc tgcacggggg ctattaagtg atgatatac acagcgataa 57360
cgcgaaattcc gcagtacttc agtcattgcc cctgcaaact cctcttgccg taagtaagat 57420
tgctgcatga tttcttacc aaatggggct cccaagcat ggggggtatc cagaagtcgt 57480
atataattaa tgttacttag atgatgaaag tagtttcaa tattattaat gacattatct 57540
attgaagca tattttatcc ttgtttatc gatgtgttaa taaatatcgc cgttgacga 57600
attaatagcg gggagatagc ggggtacttt acgccatag tcggttaaac tcaacctgat 57660
atttcccg ctttcaggc gcaccacgta tgacgagaac atttctgca ttgtgagtat 57720
cgccattggt ggtgtaattc attgacctg ttgtatcgt gtcaccatca gctatcatca 57780
cctgttatg atgaattgaa tagttgttat ttaaccttac cggaacatgt tgttggtcca 57840
gatagtgaat ggctgaatag ttcagacggt tagctttggc atcagcaaca actcggacgt 57900
taaccctcg ctttgagcc gagacaatgg ctgtcgagat ctgcttactt gtaaaagtat 57960
aggcttcaac atcgagcgag gattgagcat tattgaccac gcttaataca ttctctaatg 58020
cagtgtgaga aggagagaat ccaacattaa aggacggggt tgcgagcgcc gaagcgctga 58080
ccagtacaaa aatgatgact gagagttaa atctcatgag ttatgtcaa agttttagt 58140
tcatccatta tgtaaaaccg aaaaaaacg cctatgttg gcttgctgta tcgagcttg 58200
gcttttatgc ttgcctgggt ttccatttg gcgatccgtc ggccgttcgg taaggtaac 58260
agcccatcag gacggtgctt gaccttaaac tgatttaaaa agtattacgg tcacttttaa 58320
tctaatttt agcccttct tggcggaata tcaagtgaac acgctgttc gataaggtct 58380
gctaaaaaac aggttaccg tacattttt gaatattaaa cataatgtag gctgcatcac 58440

catataagtc cacatacata gtaatggtat gcgatgccta cattttgtga ctaactttgc 58500
ataatcatat aagttttata taaaagggtt tgagggtcag tagaacggtt ttacatctta 58560
atattttgta tgataaatca tagtggtata gataacaaaa aacaggtgca taggggaggtt 58620
tttttagggg tctgaagcta agtcaaacga aaactcacgt taggcgagaa aggtcgtctg 58680
aaaaatgat taatggacag cgatgtccgt taaatgctat ttaccgatta aaaagacacc 58740
gttttaggag cattttcac tgtctataat gtttgattt atcgacaaa aagccctta 58800
cgtgtgaaac cgttccgtt agcgtcaaac ccctattaac gtggaggacg tatcaatgc 58860
gcgtcgtggt ttacgtttat cacagctgcc accggtacgt tcggaaaagc caaaaccggc 58920
caaaacgtcc gcgcagctca tggcggaaga tacgtgcgt gagttaattg ccgcccgtt 58980
tgccgtggga aaaccgggta tccacattca tgcaaaactgg aatgatgcgc tactactgcg 59040
ggtattgaaa gaagcgatac accaagctaa agggccgccc tttgtggtgg taccaccgca 59100
tctaaatgaa catgagaaag agaacgacta gcgagcgcta gtcgtttaaa tgattagtgg 59160
cggatttgcg ccaaatcgtc ttcagaaagg ccggttgctt ctggaccga ctcaatcggc 59220
atgcccattt ttaacaaact gcgtgccact tcgagtttgc ctttctctat gccacgttgt 59280
tcaccgagtt gaattccttc agtacggcct tccatacgac cttttctat gcccttctgt 59340
tcaagctgtt gtgcgatggt cataagtgcg tctccgtgtt gcggcacacg ctgtgccagt 59400
tcgcgaacaa aggttccga gtcggctgac tcgcctgcct gtaataaata gtgtatcagc 59460
gccatcacct gcggtgaaga gagataatct gccatcagca acgtcgccag tctgtccgtc 59520
agggtagcaa taccacgttg atgaatatgc tttgcagca gcgtcagtc cgccatgtg 59580
cgtgtctcca taatatcatc gtctggaata accgtcacat caaccagtgg aaatgcaccg 59640
ctatagagtt tatgtgcaa ctcagggtcg tcaaaactcat ctaaccaccg cgtggagtac 59700
ggataaggac tgcgtttacc cacgtaaaag agcaccggta tcaccagcgg cagcttagca 59760
tgggccgctt caaggtggcg ttgcatggca gcatcgcgt aacgaattaa gcgaaaagcc 59820

atatgcttat cgggtgagct ttgatgctcg atcaacacat ggacgtagcc ctcgccttcc 59880
 acggtatcga ggctgtaaag cacatcgctg aagtactgac gcaaatcatc ttcaacaaag 59940
 gaggctgact ccagctttag cgtgctgagg tcgcagatag cgcgtagctc agcgggtaga 60000
 tgcaactcca taaagtcacg tgcaatctcg ggctgggtga gaaactgcct aaatgtggca 60060
 tcatgggggtg tgggggtact gttttcttc ttcatcagct cagactctga aaaatgatga 60120
 gtgaatgcta tcacaatcaa agcaatacaa gatgttaagt ttacccctca gcttgctggc 60180
 agacgcggat caccgtcatt ttggataccc ctgcgagacg ggctgtttca cgcaatgact 60240
 taccatgcaa taggcgtagc gttcggatga gctcgtgttt ttgtgcatca gccaccctgc 60300
 cccgatattt accttcgct ttcgctttgc tgatcccttc cgcctgacgg cgacgtcgat 60360
 cctcataatc tttctggat atagccgcga gcatatccag catcatgcca ttaacagctt 60420
 tgagcatgct gcgagtgaat tcatcgctaa cggcgttatt gagcgccaaa tgactgggtg 60480
 gtaaatcaag actcacgata gacagctgct taccggtat ctgctttctt agcgttccc 60540
 atcctacgtc gtccaatcga gaaagcctat ccacttgctc aatgagaata atatccccag 60600
 gctcagcctc ttcaaaaagt tgcacgagtt ttggacgtgt catcgttgcg ccagagatat 60660
 tgtcgacata ccagcctgca attcgggtggc catgtaggcg agcaaaattc ttactgcat 60720
 ttttgcgcg agtggcatct tgttcagagg ttgatgctcg cagataacca aaaatgagca 60780
 tttttagcc ttgaggtaac gtttaagtag tcattttgtt aatggtatca cttatgtggt 60840
 cacattgata tggaatacca tgtttaatg cggtatctca gaagtatacc cgaatgtgac 60900
 aggctgacgc gcccgtaggg cttatccaac ctttcgcctc agatgcaagc tctgaacaga 60960
 ctcacgggtt tcgtttctgg tcaaattcta attaggcgtt taaagagaag gttttgtata 61020
 tcctgcctgt gggatagtat tgcgtgtgct gttattacat taccctccac tgagtacaat 61080
 actctgtagc cgtcaggggt gttgcactca cgatatttag cacaacctat cttgagtaac 61140
 tccgggcaga cctgacaccc aagtggaaaa tcaactgactc gttttcgaa gtgctcaatg 61200

atgccgctga tcacttcctt tggttctgac tcgatatgac gtaagtggct cgcaatatca 61260
 tcaatgcagg ttttgacagt tctggtgtac tgaataacaa tcgccattac agacccgcca 61320
 gtagttgttc ttactgaaa atattgccgt ctgccttacc ttgctctgaa agcgtcagca 61380
 acttcagtag tgcaatcgcg ttctgtcgct cctgttgcgc gtcgtatgac tcaataacat 61440
 atgccggaac cccattttga gtaacaagaa ttggttcttc cagatcgagt gacgctgcgt 61500
 ttttttcac atagctaag gtttcaatt tcataacaac ctacacataac aaagaggttt 61560
 aaatatagtc tatatttggc cttgttgcaa caatttctgg acagaatgac ctgaatgtcc 61620
 tagctgtgta gtgattactt gttaccacca taccctccac cccctcgct gctcagaaac 61680
 gatgtctaac tgcgcggttt gatgtgaatg atggttggat acgtacaata attaatgac 61740
 aatacaaaat atgttgtaaa tttttgtgt gtatgtacaa tgtgattgaa ctttatagc 61800
 aatatatggg cagggaatct atctcagggg aaactatgaa acgagattac ggtagtgtcg 61860
 gtaccatagc gctcagagca agtgccttac ttcaggcaat gagtcgggat attgaggaac 61920
 aaagaaaaga attcaatctg acagaatacc atcaaacata tactcgtaac gcggtcgcaa 61980
 aattgcctaa gctgagccga cgcacgttag agctggccgt taaagaaatg gaagaaagcg 62040
 gctatgaatt taataaaaag caggttggca acgtcgagca atatgcacta acaattcaga 62100
 acgttattga tatatatgct caccgacaga tacctaagta ccgtgatatt cataaagcac 62160
 cttacgtaat tttgtcgtc aacctaaaag gtgggggtac aaaaacagtc agtacagtaa 62220
 cgctggcaca tgcattacgt gtacatcagg atttgcttcg ccatgatctt cgtattttgg 62280
 ttatagacct cgacccgcag gcatccagca ccatgtttct ggatcacacc cacagcatcg 62340
 gcacagtctt tgaaaccgcc gctcaggcaa tgctgaatga tctggatgct gaaacgttgc 62400
 gagaagcggc tatacggccg actattattc caggtgttga tgttatacct gcttctattg 62460
 atgatggttt cgtggcgagc cagtgggagt ctctggtagc agaacattta cctggtctta 62520
 aaccttctga agttctcaga aaaacaatca ttgaccgtat cgctgggtgat tatgattttg 62580

tctttattga tactggccct catcttgatc caticcttct gaatggetta gctgcgagtg 62640
 atttgctttt gaccctacc cctccggcac aggttgattt ccattcaacc ctttaagtac 62700
 tgactcggtt gccagaaatg cttgagcgtc ttgaagaaga aggtgtagag ccacgcctga 62760
 gtgcaagtat tggatttatg tcaaaaatga ccagtaagcg cgatcacgaa acgtcccata 62820
 gtctggctcg tgagggtgat gcgagtaaca tcctagactc atcgctcccg aggttggacg 62880
 gattcgaacg atgtggtgag tcttttgaca ccatcattag tgctaaccct gtttcgtacc 62940
 cgggaagtgc agaggcattg aaaaaggcac gtactgaagc tgaacggtt actaaggccg 63000
 tatttgaccg aattgaatat atcaggggag cgtaaaaatg aaacaggta tagctcgtgg 63060
 tcgggttctg ggaaatagta attcagagtt cgctagaatg ctcgaaggcg acggtgatgt 63120
 taaaacattt acccttaaat caggcgtgca ggctaggttt gtcaaacag ttgtgttaag 63180
 cggagaagtt gaatcaaaaa cgctcgttga tgcttcggtt aatggacgtg atcagacaat 63240
 gcttacgcgc gagtccgtca gtgatattc ccggacgata aagctgcagc agttcttcc 63300
 ggctattggt cgggagggtta atggactaat tgagatatta gatggaaccg gacgtcgtgc 63360
 tgcctgcac ttaataacg ttaattcga aattctggtt acaaaagatg atatctcact 63420
 cgccgatgca cggcagttgg cgaaagatat ccagactgcc agagaacata gtcttcgca 63480
 gctggggaag cgactcgaag ttacctacgg aaccagcatg acgaaagaag atattgcgtt 63540
 gaaagaaaat ctctctccgg cgaaagtac acgtgcgtt caggccgcag cagtgccaga 63600
 cgaaatggtt gcagtgttcc cggtgataaa tgatattcg ttgtcagatt atcagtttt 63660
 actgaaactg gccgaagaag caaacaacaa gcaaacatcg gtaacagagc tgatggaaaa 63720
 agttcagcat cgggtgaaga ccatgccaga ttatccggca attgataaaa gcaaaattct 63780
 tgcggttatc cggtcggaga gcaaatgct gacagccctc ccaactagaa cggttcaaac 63840
 agagaagctg agagaatttt cagatcgtaa tcagttgcc agaaagaaaa ctgatccaaa 63900
 gaagcgactt gttgttatg agtttcccg tatttccgct gaggcacagt cggagattga 63960

taaggcaata aaacgtattc tggaaagact tccagaatca ggtgagtaag ggataaggat 64020
 gccgaagagc atcctttttt gtatgttttt caccacgcca atttcattggt tattgtttg 64080
 attataaagg aaaattgaaa attctttcac actgaaatca ccacgctttt caacctcttc 64140
 gtgactcata atttcgctat tggcagttca gaccagcgag ttgtataggc aggcgaaagc 64200
 atctcccggtt ttatatgcca ttacagcgct accccttcca gcaaaccaca ctttcccag 64260
 acatgaatat ccatgtatct catctgttcc aacttatgta atttacttcc tccatttaca 64320
 ctgcgttgcc atgcactcgc tttcaggaaa tcagtataat agcccctaaa tcattcttc 64380
 ggagtgaatg gacatggcta ttgcaggttg cgattacca acttttgcca cccggctcaa 64440
 tgaagtgcct actctcagtg tgccagtgcg tacacctgaa aagctttttg ggccgggataa 64500
 gcagttggag acgatacaac tggcacttca ttaccgggc cgacatgtgt tcatttatgg 64560
 cgatcgcgga gtaggtaaaa cctccctcgc ccacacagcc gcttcgctta tccagtcttc 64620
 ggataaccgt cctattaccg tcagttgtga ccatgactcg accctggaaa cagtcacga 64680
 atcggttatt agccaaggaa tgatgcgcat gccggtagac cggtacaaaa cgtctgcaac 64740
 ttttggcttc aatattctg ttttaaaagc cgaagcccggt gttgaagagc gtgaaacttc 64800
 tcgcgttcgt tcagtcgtta atatggccag tgctgttgaa gccctgaact atctgacgga 64860
 acgctattcg gataacacgg ttattgttat tgatgaattt gacctgatcc gtagcgagga 64920
 gcagcgtgcc cgctttgggtg ttttgcctaa gcagttaagc gatggggatg taccggttcg 64980
 tatcatcttc accgggattg ggcagtcggt atctgatttg attggcggac atctgtccag 65040
 tcagagacag attgagcagg ttgatcttga acgtctgcac tggacaggtc gtcagcgtat 65100
 cgttgaaagt gcatttagat attttgatat taatatccct gatgatatcg cagaccgtat 65160
 atgcgcgttg agtgatggat ttcctacta tgccatctc atgtgcagca agctccttca 65220
 tgagtgttac atggcagatg aagtcgttag cacagttaca cgtgatctat ttctagcttc 65280
 gctcgatgca gctgtattgt ctgctgagga aacgctcaga tcattgtatg aggcagctac 65340

ctgccgagat gagcatatgc atcacattct ttgggcgatg gctgaagggtg cagacctcaa 65400
 cagaatgaaa gaccacatca ttacctcta tatccaggtg atgaagtacc tcgacattga 65460
 acctctgacg cagaaaaact tcgacagtcg ttttgctcgg ctctgtaaag agaatacacgg 65520
 atctattctg tgccatgcgc ttgtcgggaa ggtggtgtc cgccaggat ggttcggtt 65580
 cagggaaaac atgatcagag gctttgtcag aatgcaggca gagaagtgcg gaatagttct 65640
 ggattttgat cggcagtata gcgccatac agcaagtacc agaacagctg cagtttagagg 65700
 ggtatacaat cccctcagca cgggtggaacg cagcgtagct cgcctcagac gtgatgatga 65760
 aaaggaagct gaagaaaacg aataacgtat ttgtaaatga atggaatacc cgcaattat 65820
 atatgcaata ctgggttatt cagcgtttgc atcatgtcga gttaccgta cagcggagtc 65880
 ttgtcttct cctgtctctt gatcaggcaa ttactcaatt ttcgaggcta acatcttaat 65940
 gctgttttag tgtcggggga tgtgctaac atcttctca ggctgtgggg cacgaccagg 66000
 cgcattgaac gtgatagtga tgatcttct gccagcccc tctctgaaa gggcatcatc 66060
 cacactgaca tcacgaatca gtggacttc ctctctata tgtcgggcaa tatcccgag 66120
 ccactctgcc agcattctc tgtccatct tctccgtcc ggttgtgtac attcagcatc 66180
 aacataccac accagaaaaa gtgaagtctg cgtagtgtgg taaaagatg accgttttgt 66240
 caggcgcgt gtcacccgtg ctggtagcga cctgcgcgga ataccctcat ttatacaca 66300
 ggattgccca ccgaaattgt ggacagcaac gatgaaaata cgatgtcgt gcgctcctca 66360
 ttcatatgc tctgtgtga acgccgtgcc gctactgtag ccgggccgt gcgaatgcaa 66420
 gggttcgtc tgccggtgtc ctacccggt cgcagttat ttcaaaggct ttaccgctg 66480
 tcttccgtc gtttccgtc tcaatttct cgtcaaacc gtccagccag cgtgggctt 66540
 ttactgcgc tgcggcttgc ggcaccgcc ctgcattctc cgctttcgc ccggtgtcg 66600
 tatcggcacg gcgtaactgg cgccgcatth gagaaaggag aactaccatg tcccgattta 66660
 tccagggtaa ttgcgtccat atcatgtccg gcttccgga taatgctgtc gatttcattc 66720

tcaccgaccc gccatatctc gtcggtttc gtgaccgtca ggggcgtacc atcgccggcg 66780
 ataaaaccga tgaatggctg caaccgcct gccatgagat gtatcgctg ctgaaaaaag 66840
 acgcgctgat ggtgagcttc tacggctgga accgcgtcga tcgctttatg gccgcctgga 66900
 aaaatgcggg attcagcgtt gtcggccacc tgggttttac caaaacctac acatcgaagg 66960
 ccgcatatgt gggctatcg cacaatgcg cctacatcct tgcaaaaggc cgtccgcccc 67020
 tgccgcaaaa cccgttgaat gacgtaattg cgtggaaata ttcaggcaac cggcaccacc 67080
 cgaccgaaaa acccgaacc agcctgcaac cgctgattga gtccttcaca catcccggcg 67140
 cgattgtgct cgaccccttt gccggcagt gctccacctg cgtggccgcc ctccaggctg 67200
 gccgtcgtta catcggtatt gaattgcttg agcagtatca ccgggccgga cagcagcgtc 67260
 tggccgccgt ccggcgccc atgcagtacc cggccgctaa cgacgagttc ccggaggccg 67320
 cgtaatgaac tatgcaggac acgaaaaact ccgcgcagaa gtggcggaag tagccaacag 67380
 catgtgtgac ctgcgggca cgctgaacgg gatggagcac cgctatcgtt ttactctga 67440
 tgtgtggtc gaacgcctga cccgtcagac ccttttcgc atcaatgcc tgtttatggc 67500
 ggcatacaac gaaatgcttg agctggatgc ctgctttaag gactaaggag aaaaacatgt 67560
 acggaacctg tgaaccctc tgccgcttgt tgcgtgagca gtatcccgca gaaacccgc 67620
 tgaacctcat tgtctggtcc ccggcgata tcgaagcact ggccgacgga atggaatatg 67680
 ccgttcgga acaggacaca agggcggtac tggcgcgtat ggacgccata ccggaagaac 67740
 aacagcttga gtcgggcgtg tctgccgtg cagtgatgga tctgattgaa caggtgaaag 67800
 aggcagtcc gccggtgatg gtgccggcg atctgcttga aacctgcta accactgccg 67860
 aacaggcgtt atggcacagg gaatggaccg cccgtgacag caatcatccg gtcccgaaa 67920
 gcgttaccg ccgcctggct gatgcggcga aagttcgcg attactgaaa aaatgaaatc 67980
 aacacgccgc ccggcgcg tgtactgacc ccgttcagag gaaccatta tgcaggaaac 68040
 caccacgtta aacgcccttg tgatgcgccg tgcgcgcgat ttgattgctg attatggatg 68100

gcctgaccat accgatgttg atcagcgtga tccggtaaat aaaccgggat ggataagcat 68160
 ttatgtccgt ctggatgcgg caaatattgt tcattctgtt cctttacttt gtagcgggtga 68220
 catacccgca gagctgcaaa atgcatgac aaaaatagcc gggacgtcag cgagattat 68280
 ttatccggc agccgctatg ccgacgcgcc gcagcttccg gaggacggaa cacagatagc 68340
 gtccccctgg gccgggggaat ggctgacgga gccggagatt caggctgtaa cggattgcct 68400
 gtcccgcgcc gtgcgggatg tatcccgga ggtatgggag gatgcgcgcc ggataaaggc 68460
 ggcgtgacc acgcgcgggg aaacgtgtt ttatcgtcag acccgaaatt tccgtctggt 68520
 tgtgaaggaa aatgatatgc cctgctggct ggacgatgat gacaatttc cgggtgtgct 68580
 cgatgccatc ctgaacaaag gggcacgcta cagcagcgtc gaggctttg ttatcagcga 68640
 caaagttgat caaatcctgg catgtggcca gatgtgcgat gtgtgcgta ttccgggcga 68700
 gcctccgcgc cgggtgatgg atttaaccct gttacatgag gtcattggcag aagcgcgtgc 68760
 agaaatcagt cttgtccga atgccctgtc agcaatccgg ccagtgtagc gaacagcagg 68820
 gggcggcggc cccctgaatc taccacgaag gatgtgcgc gctccgcttt tacggctctt 68880
 cctccacgtt gtccgggtt cgcggtgagt aacgtcccga gcggtctgcg gcttacgccg 68940
 tgcctctact ctagcccga cgtgcaaat gcaagggttc actgacgtc atgctttcac 69000
 ccggtgcgc tatgtttaaa tgctgtgc ggttctccc gtcgttatct cgctcaatat 69060
 tcgtcgtga accgtccaga cctctccgc tattaccgg cgctgcggct tcattcatcg 69120
 cccctgcatt ttctctccc tgcgggctg tcgtgtcggc acggcgtaag ccgtaactca 69180
 gacaacatcg actatggagg atttttatg cgcactacga ccaccacacc ggctgtttat 69240
 gtgggtacgt atcacaata caactgcggc agcattttg gcaaatggtt tgaactgacg 69300
 gaggttgacg gcaggagga ttttacgag gcctgccagg cgctgcacgc cgatgaatgg 69360
 gacgcagaat ttatgtcca ggaccaggaa ggtatccgt cgcagttcgt ctctgaaagc 69420
 gccattgact gggattttat cgccgcttac aaacgcgcc aagaagaggg cagggaagcc 69480

gcttttatcg cctgggcgga gtataccggc gactgtgact atgacgcgtt tgatgatgca 69540
 taccgcggcg aggcggaag tgaggaagac tatgcgagg agatggtga cgataacggc 69600
 ctgttaaatg aggtgccgga gccgctgcgc agctacttcg attttgaggc gtatgcccgg 69660
 gattgttca gcagcggcta tgtgttccat gacggttatg tcttcggtta ctgattttcc 69720
 ccggcaggcg gtttagccgc ctgtcagccc gcgcgcaaaa ccctggcagg ctctgcctgc 69780
 cggcgaagta cgccgcgcct gcggcgccgc gtatctccgc cagtgcctga tgtcccgtg 69840
 gtgtcagggt atgaataccg gttgttgca gcgggtcggg gttatttctg ttccggtgtt 69900
 aatactgcg ctgccgtagg caatagtggc cataccgggtg gcgtactggc tgatatcgt 69960
 gtctgtcgg cttttcttc cgggcgatat gactgtgggc gacttccta gcgggaaccg 70020
 gcgctgtcgt aaacggagcc ggtaaaccgt ctccgcctg tcgggcttc atgcactgt 70080
 gcgaggtca acatcacgt tgcggcatcc gtaaaccgat gcgccgtct caccagccc 70140
 gcggtaatgc tgccgggctt cttcggggca acgcgcttc gcgccgcgc gttccgtcgt 70200
 tgcagcgggt tcctgtcat tttctctgg tcatttacc ctttgagtc ctttcgccg 70260
 ggctgagaca agcacagccg ctgtcagctg tccagggtta atggcacgcg gtaaaccgcg 70320
 ccctggacat ccgccatgc ccgcgtggt ttacgccct gcggcgaac gctctcaaac 70380
 gggatgatgt tttaaaagc aaaacaggtt cagaaggagg agcaacatga gcgaggcgt 70440
 ggcggttta cccgacgaca ctttaccgc cgaacaggct gaggtcgtg cggcgcagta 70500
 caccaacgtg gcaattgagg acgatcaggg ggcgcatctt cgcctggtg tccgtcagaa 70560
 cggtgaaatg gtctggcgca cgtggaactt tgagccgggc ggcacgtact ggctcaaccg 70620
 ttatatcgcg gactacggtt tccgaagcc gcagtaagaa agaggtgccc tgccggagcg 70680
 cgaactccgc agggccagac aatcatcaat atccagtga gtatcaacta tgtcagtaac 70740
 cgatgttaaa gcaaaagccc caaaaaagc gagcagcaaa aaaatcacga aggcgcagga 70800
 agaagctctg aaagccgccc ttgaggccgc tgcacagag tatgttccgc tgtccagtct 70860

cgctaaatcc cgcgtgaacg tgcgcactat cccgtattcc gtggacagcg ttcgcggtct 70920
 ggctgactcc atcgaggcgc tcggactgct gcagaacctg attgttcaca cctcgcgga 70980
 cggacaatcc ggcgtggccg caggtggctg ccgactgact gccctgaatc tgctggcgca 71040
 ggaagatcgt cttgcggctg atcatacctg catggtgaag cgagtctcag acgacattgc 71100
 ggccctcgcc tcggttgccg agaacgagca gcgcgccgcc atgcatcccg ccgagcaa 71160
 cgcaggtttc cgtacgttg cagagcaggg caaaactccc gcacagattg gcgacgccct 71220
 cggcttcggc tcccgccacg tgcagcgcat gctgaagctg gcaaactcg ccccgctcct 71280
 gatggagaag ctgcgcagg acgaactgac cgtgagcag tgcaggcgc tctgtctga 71340
 ggacgatcct gcccgtcagg tcgaggtatt cgaaaactg aaggccagct ggtcgaacgc 71400
 gccgcacac ctgattaaac gcgctattac cgaaaccgag atgcgcaccg acaacgcaa 71460
 atttcgttt atcgggcgcg atgcctacga ggcagcaggg gggtacgtcc gtgaagatct 71520
 gttcagccag gacgagggcg acggcacggc agacagcgtg ctggtgagc gtctggtgca 71580
 ggagaagctg gagcgatcg cgcaggacat tcagcagcgg gagggctggg catggagtcg 71640
 cggacgcga gcccgcatct ggtaccacgg cgaagacgg aaggagtgcg tgcagcctgt 71700
 tgaacccgat ccggtgtaca cccctgagca gcagcagcgt cttgatgcgc tgcgggagca 71760
 gtacgataca tatgacagcg ttgcgacga gtcagatgcg atcgaagcgg acatcctcgc 71820
 cattcaggag gcggcagaag ccagcgcgtg gactgacgac atgaagtcag gcgcgggagt 71880
 gatggtcagc ctgtacgaag ggcaggtgta cgtgcagcgc ggtgtgcgcc taaaagcgga 71940
 tatgccgga gaaaccgtaa ccagcagcgt aacggtgcc ttcacctac gccagcccga 72000
 cgccgcagag gggatcagcg ttccgtgct cactaaaatg acctccgagc gtacgtggc 72060
 agtacaggcg gcgctgatgc agcagcccga aaaagcgggt gcgctgatgg tctggcgcat 72120
 gtgtacctgc gtctctcgg gctgtctgac cagcagcac ccgttcgta tcagtctgac 72180
 cgtgtccac ggcagcctga cggagaacgc cccgtccgt aaggatggcg cagcgttga 72240

gatgctcatg accgaacggg caaggctgaa agccctgctg ccggaagggt gggagaagga 72300
 cttcaccacc ttctttgccc ttgacggcgg ggtgttgatg tcgctgatgg cttctgcac 72360
 ggcctgttcc gtggacgggg tacagaccg cgataigggg cacacctccc gaagtccact 72420
 cgatacggtc gaggcggcaa tcggattcca cctgcgcgac tgggtggcagc cgacgaagga 72480
 caactatttc ggtagcctga aacatccgca gattgtggcc tcctgaaag aggcggggct 72540
 gacgggcgcg gcgggtgacg cggagaagat gaagaagggc gatgcagcag cgcagcgga 72600
 gcactttatg cagcacacc gctgggttcc ggcatggctg aaaggaccag agccagcggc 72660
 tgaatccggt gctgacgacg cgtttccga taccgacagc actgacaacg acaccacaa 72720
 cacggcacac gccgcctgat aacggagagc cgcccttggt tgaacagggc ggcaattgta 72780
 acgaacggtg caatagtgat ccacaccaa cgcctgaaat cagatccagg gggtaatctg 72840
 ctctcctgat tcaggagagt ttatggtcac tttgagaca gttatggaaa taaaatcct 72900
 gcacaagcag ggaatgagta gccgggcgat tgcagagaa ctggggatct cccgcaatac 72960
 cgttaaacgt tatttcagg caaatctga gccgcaaaa tatacgccgc gacctgctgt 73020
 tgettcact ctggatgaat accgggatta tattcgtcaa cgcagcgccg atgctcatcc 73080
 ttacaaaac cgggaacgg taatcgctcg cgagatcaga gaccagggat atcgtggcgg 73140
 aatgaccatt ctgaggcat tcttcgttc tctctcggtt cctcaggagc aggagcctgc 73200
 cgttcggttc gaaactgaac ccggacgaca gatgcagggt gactggggca ctatgcgtaa 73260
 tggctgctca ccgttcacg tgttcgttc tgttctcgga tacagccgaa tgetgtacat 73320
 cgaattcact gacaatatgc gttatgacac gctggagacc tgccatcgta atgcgttccg 73380
 cttctttggt ggtgtgccgc gcgaagtgtt gtatgacaat atgaaaactg tggttctgca 73440
 acgtgacgca tatcagaccg gtcagaccg gtccatcct tcgctgtggc agttcggcaa 73500
 ggagatgggc ttctctccc gactgtgtcg ccccttcagg gcacagacta aaggtaaggt 73560
 ggaacggatg gtgcagtaca cccgtaacag ttttacatc ccactaatga ctgcctgcg 73620

cccgatgggg atcactgtcg atgttgaaac agccaaccgc cacggtctgc gctggctgca 73680
 cgatgtcgct aaccaacgaa agcatgaaac aatccaggcc cgtccctgcg atcgctggct 73740
 cgaagagcag cagtccatgc tggcactgcc tccggagaaa aaagagtatg acgtgcatct 73800
 tgatgaaaat ctggtgaact tcgacaaaca cccctgcat catccactct ccatctacga 73860
 ctctattctgc agaggagtgg cgtgatgatg gaactgcaac atcaacgact gatggcgctc 73920
 gccgggcagt tgcaactgga aagccttata agcgcagcgc ctgcgctgct acaacaggca 73980
 gtagaccagg aatggagtta tatggacttc ctggagcatc tgcttcatga agaaaaactg 74040
 gcacgtcatc aacgtaaaca ggcgatgtat acccgaatgg cagccttccc ggcggtgaaa 74100
 acgttcgaag agtatgactt cacattcgcc accggagcac cgcagaagca actccagtcg 74160
 ttacgtcac tcagcttcat agaacgtaat gaaaatatcg tattactggg gccatcaggt 74220
 gtggggaaaa cccatctggc aatagcgatg ggctatgaag cagtccgtgc aggtatcaaa 74280
 gttegettca caacagcagc agatctgta ctccagttat ctacggcaca acgtcagggc 74340
 cgttataaaa cgacgettca gcgtggagta atggccccc gcctgctcat cattgatgaa 74400
 ataggctatc tgccgttcag tcaggaagaa gcaaagctgt tcttcaggt catcgctaaa 74460
 cgttacgaaa agagcgcaat gatcctgaca tccaatctgc cgttcgggca gtgggatcaa 74520
 acgttcgccg gtgatgcagc actgacctca gcgatgctgg accgtatctt acaccactca 74580
 catgtcgttc aaatcaaagg agaaagctat cgactcagac agaaacgaaa ggccgggggtt 74640
 atagcagaag ctaatcctga gtaaaacggt ggatcaatat tgggccgttg gtggagatat 74700
 aagtggatca ctttcatcc gtcgttgaca gttgcctcaa tgtgcgctga cgggcaggac 74760
 gtgttctgc gcttctact gaaagatccg aaagccggtg tcggtatcag tctatgcaac 74820
 aagggtgtcg aaaacccaat tccgaagttt gaggtacagc tggcgtctcc gtacaaggag 74880
 aaaggcgaca aataccatt taaaccaaac ccaaaggcca agtggccaat gatcggcagc 74940
 ctcaaactcg atggtctccg ggttatctgc gaagtcacg tggatgagga agaggtgaac 75000

ttctgacgc gcaccggcaa tccgattacg tcactcgatc accttaaacc ggccatgctg 75060
 gagcgtggcc ggctctccgg tttaagcac atcttctcg atggtagagg tactgcaggt 75120
 acgttaacc agtccgtgtc ggcgcttcgc aagaagaacg tgaaagccat tggcgccgtt 75180
 taccacatct tcgatttctt cttaccagag tggcgtgctc aggcaaaaag caaagagtac 75240
 ctgaagaccg gtatgaagct gaaagagcgc ctggctatgc tgggtgcatt gttccgcaac 75300
 acttgccggg aagattacgc gcaagatc cacctgcac cgttctacat catccatagc 75360
 catgaagact ttatgaacg cttcatgaag gccttgatg agaataaga gggggagatg 75420
 ggcaaagatc cggattctgt ttacgagtc aagcgtacc gcagctggg gaagctgaaa 75480
 gacgaggatt ccgaagacgg tgaaatcac gacttcgagc caggcgacc ggactctggc 75540
 ttgcgcata cgctaggcaa gatagtatt cgtctggaga acggcgcat cgttcgtgcc 75600
 agcggatatc aacataagta cctggatgag atctggaaca atcaggagaa atactgtga 75660
 cgcatcgctg aggttactg ccatgagaaa acgccagacg gtagcttacg tcacctcgt 75720
 ctgaagtggc cgaaatgtct gcgtgatac gaagatcgt ttggagataa agactgatgt 75780
 tcggctggat gattgtatt ttggtgtcg gcattgtat cggcagctg gttatgtcca 75840
 gctgcatcaa cgattacgta aaagccggg tcatgcagag gcgcggccgc atttaccgca 75900
 ttgtagatat cacgtacaca ctgaaggaga ttaaggatga tcatgttaag taaacgggag 75960
 aaggaaaccc tgcgtgaaat cagccagtgg aaggagtct acgctaactg gaagccaaag 76020
 acccgcgcca aactggaacg catgaatctt gtcgctaacg ttccgcaaa gggatgcttg 76080
 gagaactatc aactcactga aaaaggacac tcaactgttc agcaattgac tgaggctggt 76140
 gcgttccaat gattccatac atcacattat ctttctgtgg ggcgctggcc ctcggcttca 76200
 gtatctgtcg cgatctggc aggcaggaac tgaaaaccaa aacgcttcgc atcgtaagc 76260
 gtctgtatcg ggtgttcac gagacaggag tgcagaaatg agcaattga cctcttcga 76320
 ctggtggctg gcaacctacc ttgtggcggc cggttcgga tatgccttt acgttggtca 76380

gttaatcgtg aagctattgc tgatcagatt tgccagccat aaacgcatag atgacggtct 76440
 gtggcgctg ggttctctgc tggagactca ctacggcgaa ctcaaggaga acgaaactat 76500
 cactattcaa gcgaagcgtt ttaccgccat catcacgaga acgccggaac agaaggtgag 76560
 ttgatcaaa aagatagcaa ctgaacgagt cacagacaaa taagtattta cttactatc 76620
 tattatgtat aagattcatt tgtttcgtt gggacgcgac tgtttgaacg ttaaataaa 76680
 ctgcaaacga agatacgtac ctggcagtag cctaagaagc caaacaccag cgaggtcagt 76740
 ttccagctc gtcaccgaaa tgggacacac tgagcgagtg tgattgcaga acgcaggata 76800
 gggcatgtt caccacccat gccctattcg atgaagtaac aggatgggag gttggttcc 76860
 tcattccatt ccatcatccc ggttcagcc agctgaccgt ccatcctgtt acgtcattc 76920
 cactacttat gtctttaat ctggggttaa aagcggcgac gtaaccggc tggtcgtt 76980
 agccagcgca caacgttgag gtcactgtt ttctttaa tcatacaggt gattccacag 77040
 aactgtagt actgatcaat atgtgggtc gaacataaat cggttcagt gcctcaacgc 77100
 tgtgaaatcc aaaataatta actcttgggt aatcctaag ttactgacat ttccggctc 77160
 acaatattat tggatatac ctgcattca tigtaaaact ccatgtcacc acaataaatc 77220
 gggagaaaat aatgacaatc aatagtattg tcattcgtc ttttatgac ctccacatcg 77280
 taaccatccc gcttatttaa attataaata ggcaaagagt tataatatat gttgtacatg 77340
 tgatgaacat actgatcata tgtatcattg aagaaaaaat aagcatacag gcctttatct 77400
 accttattt cactatcgt gaaatgctta ttctatccc aaacaaccgt tcttgaata 77460
 atgtattcg tttatcatg aaaggggatt ctgttgata ctgttatagc tgtattttc 77520
 ttcaacgaat catataact acccaatcta catttgaat ctatcccaga gtagaacact 77580
 aaatccctaa aattaaagca ttgaccaatt atatttctct cttaaggta acagattcgt 77640
 ggttgaaggt attcacagt aatttccct ctaccaaca aacctttaa ggacaaaaa 77700
 gggatcatcc tatactgccg tgggggtataa ccaaatatt tcttaaattc tctggtgaat 77760

gtctgttcg aatcataaaa aagctttgct gatattctta ttattgtcag cctggttaagc 77820
 cgtaatagtg cagcagctct actagccctt ctaactctaa tatatgttcc aataggcatt 77880
 ccgacatatt ccttaaagga aatttgcaaa taccttctgc tgaatcctga atacaaaacc 77940
 aaacagtcaa tgtaaatgaa ttctgactcg agattctctt ctatatattg aataattgaa 78000
 ttacagtca tctgttttag catgaatata acccaaatca aaataatagc attctagata 78060
 gtgggccggc gccgggactt agctatttgc gcataccag caacaccaat cttagctatt 78120
 tgtgcacgcg catcaatctc aaaattagct atttgcgcaa caagcaagtg gaggcgcgca 78180
 aaagctaaac ttgtgtgca ttttaataa aaattgttct cagtgaggct gtgtctacgga 78240
 tataaaaatc ccttcattt gttaccacc ttttacgca tatcgtcgat atgaaatgat 78300
 ggggaggggg tgggaagggt ttgtccatc tccgtaagga ggtaagctc atgatttaa 78360
 atagattaag tacgttagga attattactt tcggcatgct tagttttgct gcgaactctg 78420
 ctcaaccaga tatcaattc gcaagcaaag agtatggcgt gactataggt gagagtagga 78480
 tcatataccc gttagatgct gctggcggtt tggctcgggt gaaaaacacc caagattatc 78540
 cggttctcat tcagtctagg atctacgacg agaataaaga aaaagaatca gaggatcctt 78600
 tcgtggtcac tccgccattg ttctgattgg atgctaagca acaaaattct ttgcgtatag 78660
 ctcaggctgg aggtgtttc ccgcgagata aagagagcct aaagtgggtt tgcgtaaaag 78720
 ggattccacc aaaggatgaa gatatatggg ttgatgatgc gacaaataag caaaaattca 78780
 atccagacaa agatgtggga gtgttcgtgc aattcgcaat taataattgc attaagcttt 78840
 tggttcgacc gaatgaatta aaaggaacct ctatacagtt tgctgaaaac ttaagctgga 78900
 aagttgatgg ggggaagcta attgctgaaa accctcacc ttctacatg aacataggtg 78960
 aattaacatt tggagggaaa agtattcctt ctactatat tccacctaaa tcgacgtggg 79020
 cttttgattt gccaaaagga ctacggggag cacgtaatgt ttcgtggaga ataattaatg 79080
 atcaggaggg gttggatcgt ttgtattcca aaaatgtgac ttatgatga tgttaaagg 79140

ggacgggaat aatgaggtat tcaaagctgt tcctgtgtgc agggttaact ttggcaacat 79200
 tgccttgttg gggacgcgca tatacttttg actctactat gcttgatacg aatagtggag 79260
 agagtataga tgtatctctt tttaatcaag gacttcaact tccaggtaat tattttgta 79320
 atgttttgt aaatggtcga aaggtagact ctggaaatat cgacttccgt ctagaaaaac 79380
 ataatggaaa agaacttctt tggccatgcc tatcatcctt acaattgaca aagtatggca 79440
 ttgatataga taaatatacct gatttaataa aatctggtac agagcaatgt gttgatttat 79500
 tagcaatacc acattcagat gtgcagtttt attttaatca gcagaaatta tcgttaattg 79560
 tgccaccaca ggcactttta cctagatttg atggcattat gccaatgcaa ttgtgggatg 79620
 acggcattcc tgctctgttc atgaattata atacgaacat gcagacaaga aaattcagag 79680
 aaggaggcaa gtctctggac tcttattatg ctacgttgca accgggatta aacatagggg 79740
 cttggcgctt tcgtagtca acctcatggt ggaaacaaca aggatggcag cgttcgtata 79800
 tttatgccga gcgaggattg aatacaatta agagccgttt gacattgggg gaaacctatt 79860
 ctgatagcag tatctttgac agtatcccga ttaaggggat aaaaattgct tcagatgaat 79920
 cgatggttcc ttattacaa tggaattttg ctccagttgt tcgcggtatc gcacgtacac 79980
 aagccagggt agaggtttta agagatggct aactgtaag taatgagttg gtgccctcgg 80040
 gaccatttga gtagcaaat ctctctctgg gtggggggag tggtagctg aaagtcata 80100
 ttcataaag tgatggaaca aagcaagttt ttacagttcc atatgacaca ccagcagtgg 80160
 cattacggaa gggctatttc gaatattcaa tgatgggggg agaataatcgt ccagctaag 80220
 atcttacaca aacatcgtat gttggcgctc ttgggatgaa atatggtttg ccaaggaatc 80280
 ttacgttata tggtaggacta caagggtccc aaaattatca tgccgcagct ctgggtatcg 80340
 gtgctatgtt gggtagtttt ggtgccatat ctacagatgt tactcaagca gacagccaga 80400
 aaaataaaca aaaaaaagaa agcggccaac gttggcgctg tcgatataat aagtacttgc 80460
 agagtggaac atcgtaaac attgctagcg aggaatacgc cacagaagga ttaacaaac 80520

tcgctgacac gttaaatact tattgtaaac ctaatactag aaacgattgc cgttttgatt 80580
 atgctaaacc caaaaacaaa gtgcaattca atttaagtca aagcatacct gggtcgggga 80640
 cgcttaattt cagtggttac agaaaaaact attggcgtga cagtaggagc acaacttctt 80700
 ttctgtagg ctataacat ttttttagga atggtatgtc attgacttta aatttatcga 80760
 agacacagaa tatcaataag tatggagaaa aaactagtga gctattatct aatatctggt 80820
 tgagttttcc tctcagtcgc tggctaggta ataactcaat aaattcaaat taccaaatga 80880
 catcagattc tcatggtaac actacccatg aggtaggtgt gtacggtgaa gcctttgatc 80940
 gccaaftata ctgggacgtt cgcgaacgtt ttaatgaaaa gggcagaaaa tatacctcca 81000
 atgcactgaa ttgaattat cgaggaactt atggggagat cagtggtaac tacagctacg 81060
 atcaaacca aagccaactt ggtatagggtg taaatggcaa tatggtaata actcagtacg 81120
 gtataacggc tggccaaaaa actggagata ctattgcatt agtacaagcc cctgatataa 81180
 gcggtgcttc agtgggatac tggccaggca tgaacacaga ctttagggggg tacaccaatt 81240
 atggttactt aacccttac agagagaata aggtagaaat taaccagtt actttacca 81300
 atgatgcaga gataacaaat aatattgtta gcgtgatccc gacaaaggga gctgtagtat 81360
 tagcaaaatt taacgcaagg attggtggac gattgtttt acatttaaaa cgctctgaca 81420
 ataaacctgt tccatttggc tctatagttt ccattgaagg gcaatcatcc agctctggca 81480
 ttgtcggaga taatagcggc gtctatttga ctggactacc taaaaaatca aaaatacttg 81540
 ttaagtgggg gagagataaa aatcaatcat gttcatctaa tgtagttcta ccagaaaaaa 81600
 cggtatttc tgggtgcttat aggttatcca caacctgcat cttaaataac tgaaacggat 81660
 gtttatttca aacaggacac aagccctctc tacgaatttg ttcgtggatt ggattattcg 81720
 atagaggtaa tatatgaaaa aaatcagttc cggtatcgcc attgcattat ttggaactat 81780
 tgcaactgct aatgcggcag atttaactgc aagcaccact gcaacggcaa ctcttggtga 81840
 accagccgc atcactctta catataagga aggcgctcca attacaatta tggacaatgg 81900

aaacatcgat acagaattac ttgttggtac gcttactctt ggcggctata aaacaggaac 81960
 cactagcaca tctgttaact ttacagatgc cgcgggtgat cccatgtact taacatttac 82020
 ttctcaggat ggaaataacc accaattcac tacaaaagtg attggcaagg attctagaga 82080
 ttttgatac tctcctaagg taaacggtga gaaccttgtg ggggatgacg tcgtcttggc 82140
 tacgggcagc caggatttct ttgttcgctc aattggttcc aaaggcggta aacttcagc 82200
 aggtaaatac actgatgctg taaccgtaac cgtatctaac caataatcca tatagataat 82260
 agataaagga gggctattat gccctcctt aatatttatg aattatccta cttgagcct 82320
 aacctcgcct ttcttaate acggcattga tagcaagact gacaaattta tgtgaagatc 82380
 aatgttagga actaatgcag aaagccacgc cctcaataga ttacacataa tacactatta 82440
 gctaagaata gagagcgcga agcaatataa taggctcata ttataacte tcaccttaat 82500
 atgcactgc aataccattg agtatattat ctggtgggaa tttttctc ctaagcgagg 82560
 atatggtgtt caaaagcga tttaacata tccgcctaac tgcgggaaga attattgtt 82620
 taggtgtggc aattatttta atggaaatct tgtgttagg gatttgttt ttattagcg 82680
 aaataatccg aaattataa tcacctccc ttttgcgtca ttcttcag gcgccctcac 82740
 cctcttgagg agagcaagag gggtatccat catcatgca acttcaaca agcagcctt 82800
 gccctacccc cgggggtttt ttatttggtg gcaaccacg tctgcagcc ctcaaacct 82860
 tcatagccgg taaaatgat tccataccta ttaagtatgg aatcattgta caaacaggc 82920
 tattttatgg ttgatcatc aaaaacttat gcctaataa ctgttcacg atacagttaa 82980
 aagggttca ctcagtgagt ggacgatgaa aaacacctt gataaagcac ggcagcaga 83040
 aaatacctct cgggaagcca tcgagtacct cgaacgcgct tccggttgt cggcagtgc 83100
 gaccgccaat ttcgacggag acatgtcgtt ttctccgcc tcatgttgt tcaccgctt 83160
 atccttactg ataacgagac gtcgacctga aattgccgtt cattgtgtt tgatacatg 83220
 gatgccgat atctctgaag taaaggtga tgatataagt aggtcttgg tcaaccagct 83280

ggtgaacca ctgatactgg aaggcaagat cgtccagggc agacgcgtgt tctccctgat 83340
 gaaacagttc ctgagctggt gtgcctttca gggattgatt gatacttcac ctttgaatga 83400
 tatgtcgctc aacaaagttg ccggtggcgc aaagccagta ccgcgcgaac gtaagctgac 83460
 cgacgtgaa gtctgggtat tctggaatat ctgggattat ttcaacgtat gtgaaggtac 83520
 aaagtgggcg gcaaggctat gtcttgttgc tgccaggcgt ccagatgaag tgctccgggc 83580
 cagaaaggat gagttcaacc ttcaacgtga tgtatggaat caaggtacgc gaaacaaatc 83640
 ggccagacag cacgcgctgc cgctaagtc attaatgcgc aaatgcgtgg aagagttgtt 83700
 cgaatacggg aagggcagcc agtggcttgt tccgtcaaata agaagaagg gcgttgatac 83760
 accaatgtcg aaggtggcca ttgcacaagc gttgagaaga attctggagc gccagagct 83820
 gatggatttg gaacctttca caccacgaga cctgagacgt accgctcgta gttattttcc 83880
 agccctgggg atcaatcaag aagtggctcg taaaataatg aatcacagtt tggaaggcat 83940
 agatcgctg tacgaccggc acgactatat ggatgagatg cgagacgcct tggatagatt 84000
 ctacgcgtac atcgcatcca tcgtagagca acaagattta gacgaaattg accacaaatt 84060
 taaggagat cgtctagcaa ctgagcttat tegtgtaaat ttctcatagt ttcttgattg 84120
 cttcaacaac ctgatctgat gcgccgcgtt gatcaccgaa acggttgca aacgcttcta 84180
 atactctttt ttctctgcg gaaaggggag ccgttccttc ttgcggaag aactcaagca 84240
 actccgggtg acgctcttcc aggaccatca gcattagccg aacagggtca gcgtccagag 84300
 ctacggccag cgctcttacc ttatcaacgg ggagagggat ctttcgctt ttgatgagag 84360
 acaggttgtt ggcgttttta taccctactt ccttggaat agtagcctga ctttcggtg 84420
 agatagtgat cagggaatca atataagccg cgtagcgacc ttgtttgcta tctgttctg 84480
 tggtagccat gtaataacct tgcgtgttta attgtctct ggtaagtgt tactgatatt 84540
 acattaaagg tgagggtgt aaagacttat ctatttctt cgataggcat caaaaccctt 84600
 tacctatgcg cattatacat ctattaagcg gcaaattgtc attatcagct tgcattggtt 84660

gtcagacaaa tctgatatag atgtattccg tattgataca ataggtagta gtatttccga 84720
 actttcgaac gtgttgagtt ggatgatatg agatgaaaaa tataacttct aatttgaacg 84780
 cccctgaggt tggacatgca tatgcgctcg ggatggatgg cgtggcaacg atacttacag 84840
 aacttaatac tgaagaactt ccgatagaca tgagcgacac gactgtcttc actttcgaac 84900
 tcagcaacaa acatttcaact ctcatcaata ctggctgcgg ctacttgcc gtaagaacc 84960
 attaactgca aatctacct attgaaacct gtacgaacag ctgggccacc tgttcgtaca 85020
 gcataaaatt acacacatta gaaaacaaat tgtttaata acaaggaaat tctcatgtcc 85080
 aaagccatga ccagagctgt gctgaaagag gtacaggact tccgcgactg cgtaaacga 85140
 gttgtagcga tgctttcagg caaacagata cctgttcag aacgaggcaa tgaagcgtat 85200
 gtccgtaca accggcgcg cgaaccagt ctggtaaaca tccatctat accggacgac 85260
 gcatcaccaa ccctcatgaa cgcagtacgt ggttttctg accatgaagt agcccatatc 85320
 ctctttactg atccgaaagt cgcatgaag atgcgcgaga gaggaaggc tccgtctacc 85380
 gggctttgga acgcgctgga agacgtttt attgaacgca gaatgggaca ggtattcaac 85440
 ggaaccgctc gtaatttct agccacacag aacctggtga tcgacaaata cttcaagggc 85500
 aaagtgtcag aggcggttc aatctgccac ggcaaccagc gtgaattgtt cctgaaattc 85560
 ttctttgcc cggctgctcg cgctgggat ggccaaagcc cttcatoga ctttatggaa 85620
 gaacactggc acctcatcga taagcctgta gccttgctca aagagcatgg tatcgacgtg 85680
 gccgttcgca atatgtcgaa cacagaggac tgcgtaaagg tcgcagctgc tatcgccaa 85740
 atcatgcagg atatgaaaga caagccagag ggcaaattac ctgagcttaa atcatctgcc 85800
 aaaaagccgt ctaagagcaa agacgagtcc gaggaacac cagagtcagg cgacgatccg 85860
 tctcatagt aatctgcacc aaagcgaacc aaaggcgaag acgacgacaa ggaagagcaa 85920
 gaagatgatg cctcagaaga ggaagattct ggggattctg attgcctga ttcattagat 85980
 aaggacttac ctatacatga taaagaaatt agtgatacag aaagtaaata tacagaagca 86040

ggccaagatg agtcaggaga caccacagaa tccgatgatg ccggcatgga atcaggtgat 86100
 tctgacgacg aaggtggtag tgatggcact ggcgctcaa cgcttggtga tggcattcgc 86160
 gaagacgccg atgactccga tggttatggc tctggcgccg ctggcgatgg ggatagtgat 86220
 aacggcgaag actccgatgc cggtcgtgag gaggccgaag gagaagacga aggcgaagag 86280
 gacgtcgccg atcacactga cggcgaaggc aaggaaaatg aggatgccgc ggaagcgcct 86340
 gaagacagtg agtcaggctt tgttctgcg ccggatgaaa tgactctgga ggacgcactc 86400
 aaggcgctcg acgagatgga agaaggaaca gacgaaatga ccgaagacgc actgtcggcc 86460
 accatcagca aagagcttat gagcgctca cttctgagt atgccccata cgatcgttca 86520
 tacgacttta tcgggttgat tgatgaggct gaagagcatg taaaacgcac cagaaagaca 86580
 ttccggcga tcccaatgca ctcacctgc gatcgctacc gcatgggtcc ggaaggcaga 86640
 aaactcttg aactgaaaat cgaaaaacat ctgtctgccg gcgtttctc gactctggcc 86700
 aaagacctgg agcgagctat cgccagccgc aaccgagttc agttcatacc gggtcagaga 86760
 cgtgggcgga tacatggcgc gaacctgtat cgtctggcaa tgaacgacga ccgcgtgttc 86820
 cgcaagaaag aagaccacag agcgggtgaac gcgtgcgtcc agcaggtgat cgactgtcc 86880
 ggctcaatgg gcggcaggaa gattcaactg gcactcgcca ggcctacac cattgcggat 86940
 gctctggatc gtatcaatgt gcctaacatc ataccgggt ttacaacgtt tggtagccca 87000
 gattatgaaa ccatgtcgaa gcgcgggttt acacgtttcg aggcgctcat gctgccatt 87060
 atcaaaaact ggaatgagaa agctaactca ccagagatcc gcgcccgcgt gggctgcgta 87120
 tgtgagacgt tccccctgct caataacgtc gatggtgaga gcgtcgcgca gctggccact 87180
 ctgtttgcag ggccaatgga ggacaaaaaa atcatgctgg ttatgagcga cggggcacca 87240
 tgtgctgcag gcgatgggtt ccatgagcat ttgcgaaccg tcaccaaaga aattgagacg 87300
 ttaagtgaca tcgatttgat ggctatcggt gttctgactg acgcaccacg acgctactac 87360
 aaaaattacg cactgggttaa cagcgtagaa gagttagggc cgtcagtcgt cactgagcta 87420

tctcgtatca ttcttgggta agaacttcac ccttaaaaaa taagtaatta cttactatac 87480
 agtctaatat atttatataa gatatacccc acgaacgaca aacagtaagg aaaaacacat 87540
 gaccgtact gcactacagc aagaagaaca ttgcccggaa gccatcgtct gcaagtggg 87600
 tggcaaattct ttcattacc tgaaatccca tatctctatg ggccgttgcg agaacattcc 87660
 tgagtccgcg aagggtctgg acgtggacga agtggtgaaa atgtacacct ctgcgtttcc 87720
 agatgaacca acgatctctc gcacggcact ggtcaaactc aatgagaagc gtgccgaaag 87780
 acattcagga gaaggaaaag tagcggagat tagcgcacat ccggggtacg caggaaacgg 87840
 cgaatacaag accgaactgg tggccgcgca cgagctgctt ggcgtaacga tcaaagagct 87900
 gggaacgccca cgcggaaaac cactacaggt gacggttaac gtcaacacac cctatccgga 87960
 gtctgtgctt gaagcgaaga agaactatgt gtatggcgac ttgacctga ttaaagacat 88020
 ctctcatgatg ctggaaatcg gaatcccagg ctatctctgg ggtcatgcag gaaccggtaa 88080
 atcttctctt cctacgcagc tatgcgccct gctgaatcga ccaatgatcc gcgcccagca 88140
 tacggcgtct atggaagaag cacacgttac aggccagatc ctcgctcgcg atggctccac 88200
 ctacttcgag ccggggttgc tggcgctggc gatgaaaaat ggctgggtgt acctagctga 88260
 tgaatatgac ttcggttcc cgcagattct gggtgtgtac cagccagttc ttgaaggaga 88320
 accgctgac atcaaagagg caactccgga ctggcgccgt atcactccgc ataaacgctt 88380
 tgccttcatt ggcactggca acactaacgg ctctggcgac gaaacgggtc tctatcaagg 88440
 tacgaacatc cagaacgcgg cgaactctc gcgcttcggc attgtttcga acgtgaagta 88500
 catgagcact aaggctgaag tcaacatgct ggctgaggct ggcgatcc gcgaatacgc 88560
 cgagaagatg gtgaaattcg cgaaccttgt ccgtgaaggt tatgagcagc atctgatcag 88620
 ccagccaatc ggtcctcgcg agctgctgct atccgcaaaa atcggaatga tgcgcggtga 88680
 tttctctgcc ggcacgaaa agtcatttat caataaactt ccatccacgt ctgcacaggc 88740
 agcgcgtgaa gtgggtcaga agatcttcgg ttaatcgtgc gtaaaggatg ttccggctct 88800

cttatcgtag cgctgaaac tggccgggct tgtctggcgt gtccggatag gtccgagtgc 88860
 caccagtcag ccaaagaggt tgcgatttcg atgtatggga agttcgttg cttccccaat 88920
 gacaaaatca agaaaaccag aaaggtaaaa acacatgaag gctctgatgg tcagaactga 88980
 cttctccctg ggagagtcag ctctaaaagc agaaaacgcg gtgaaaatcg cgagagacgc 89040
 tggctacact gctgtcattt ccgctgacag catgaacatt gccagtgtga ttcccctgca 89100
 gcgtgccgct ggcgacgata tggcgggttat ttgtggtgtt aagctgaatg tggtcgacga 89160
 tccgacatac gagcaccgcg cccgccttgc gaaagaatca gagagatgta tggaatcatt 89220
 ggtgcgtgat cgcagctact gcttcacggc actgataaag aatgagcaag gttatcgca 89280
 cgtgtgcgaa ctgatgacct tagcgaacaa gcgcgagcaa ttctactttg tcccgcgtct 89340
 ggcgctcgac caactggcgg ccgctatgc caaaggcaac atcatcctgc tgacgtccga 89400
 cattggcagt gtattccagc gccgggactt cgcaaagatt atcgggacgc tggtcacagc 89460
 tggaggacgc gataacttct acagcgtggt ttatccgcac cctaccccat tctacgacca 89520
 gattaacgtc cgggcgatga aagtagcgag cgcactgaaa atagagccag tggcgttcta 89580
 tcccgttat tacgaagcgg tcgacgacgc tgacattaaa gacattgcgc acatggttac 89640
 gaacaacatc aaaatcgacc agccgcacgc tctgcgtatt ccccaccagc gagataacgc 89700
 cggttaatggt cgccgccatc tccttgaagc gctgaaagcc ttctccgttc gcatggatgt 89760
 accggttaaca gctgcaatgg cctcaacaac gcaggacacc attatcgaag cctgcacatg 89820
 gcgctggcat gaattgccac cagcactgcc caagatggca gacgacgagc ctgcaacgct 89880
 gatgaagctg gctgtcgcgg ggctgcgcaa gcgtcttact accaaagagt ttggctacac 89940
 accaccggct tctgagcacc gcgtgtatgt tgatcgtctg aagtacgaaa tggacacgct 90000
 gaccgctctg ggcttctgtg gctacttct gatggtgcgc gacctgatga atcacagccg 90060
 tgaaactggc attcctgtcg ggccaggctg tggttcctct gccggttctc tggtggcgtg 90120
 gtgcatcggc ataaccaacg tcgacatctat ccgtcacggt cttctgtttg agcgtttcat 90180

caaccctgaa cgtctcgact taccggatgc ggatctggac ttcagccagg cacgtcgcca 90240
 tgaggtgatc gagtatctga atgaacgcta tggcgaagat tacgttgccg gtattccgaa 90300
 cttcacctat ctgggcgcgg cttctgcgct gcgtagacacc gcacgtattt acggtgtcga 90360
 tgctgcggat atggcggat ccaaagagtt caagaatctg gaggacgata gcctgtcgct 90420
 ggaagagctg cgcgagcaac tggccagcct ggacaaatac gccacgaaat acccggaagc 90480
 gttcaaagcg gcgtgtaagc tgcaaagcct gatgcgtggt ttggtcgcc acgtgcggg 90540
 gatgatctc gctggcgctt cactggtaga ggcacgccc gtcgagctgc gtggcaatgc 90600
 tcgtgtatt gcattcgata aacgttactg cgaggcgatg gggctgatta agctggacgt 90660
 tctcggctcg gcaacgctcg atctgttga tagcgcgaaa cgctacatca aagagagtac 90720
 cggggaagac atcaatctcg atgctatccc actggacgat cgtaaggctt tggatgggtt 90780
 cgctgcaggg tacacgcagg gcgtattcca gctggagtcc ggtcccatgc gcaagctgct 90840
 taaagatctg ggcggtggca tcgagccaat gagcttcaaa accgttgctg ccacgaccgc 90900
 actcttccga cctggcccga ttcaatccgg catgttgac gactatgtct ccgtggccaa 90960
 aggttcatg gctccacagt cgctgcaccc ggtactggac gagcttaccg cggaaaccaa 91020
 cggcgtgatt ctgtatcagg aacagacgat gaacgcgaca cgattgctgg ccggtttcac 91080
 gatggccgaa gcagatggtg tacgtaaagc gatcggtaaa aaggatatgg aaaagatgaa 91140
 gagcatgggc gagaagttcg tcgttcaggc tcaagctggt tggatcgacg ttgagatgga 91200
 agacggcacc acgcagcgta ttcaccgcgc ggaacacttc aaatgtgagg acggcgcaact 91260
 gcggacggtc gaagaagcgc tggaggcagg tgtgaaattg ccgatggctg ctgtacgcgt 91320
 tacagggtca caaccgggct tgtctgagac gaaagctaag gagatctggg atgccttcga 91380
 gaagaacggt gcgtatcagt tcaacaaatc acatcccgtt gcctactcgc tgatcagcta 91440
 tcagtctatg tggtaaaga cacattacc tctgagttt ttcgtgctg cgctcacat 91500
 tctgggcgag gataagcacc aggggctggt taaggatgcg ctgacctatg gcattcacgt 91560

attgccacca gacgttaacg tgtcatctaa ccgaattgag atccgcacgc tggaagacgg 91620
 cagccagggt ctgtatgcgc cattctctgc tgtaaaaggc tgctctgaga atggttgcca 91680
 ggccatcatg agagcgcgtg agaaagtggc cggcaaattc gagtcacttg agcaatttga 91740
 ggaagcggtc gagaagcgtg cgtgtgcgtg taacagccgg gtacgcgagt cactgcaaaa 91800
 agtaggtgcg ttgcacatga ttgagcctgg cagtctgcca gcgacagatc cggaacggct 91860
 gcgcgaccag gctgaattga tgggcaatct ggtgatcgac gctgtaaaag cctctcgacc 91920
 gttcgagatg aaccctaaac gctctgccga agtgaatgta ctgatgacac gcatggcggc 91980
 tgaaatgggt ctgggagacg acctgatacg cccaagcatt ggcattaagc cgaaaatcat 92040
 ggtcattctg gacaacgcga acggcaatga tgggcgtact ggctacttca tggagaacgg 92100
 ctacgacgac ttaaggcga agttgcttac tgcaggcgat ttgcgcatgg gagatctcta 92160
 cgtcaccggc gtgtgcaaaa aggtgaagga caaagagaag gactacacca aagacgagat 92220
 aggccagttc accgacttta tgcgtgaaga gatcaatctg gtgcgtccga cctatgtgct 92280
 gacgtgtggc agccggggcga cgtcactctt caacaacaag agcaaaccat ccgacctggt 92340
 tggacgcaaa gagtatctgc cagagctgga tgtgaccgtt ttctacggat ttaacccgaa 92400
 cattttgtac ttgcgccag aggaaggcga aaagctggaa gcaattctgg cagaggtagc 92460
 ggagacaatt agcaaatgaa taaagagaac accatgaacg aagcacagaa gattgcacaa 92520
 gcgctggcgg ctatcccagc ggattttcag gataaagcag ttgcagccac catgcggtcg 92580
 cagttctggg aaatcatcga ctgcccggtc acgttagatc tggcgtggc gttcgccggg 92640
 ctggatggtg ccgataaagt cagtcgtctg cgtaaatgtg ccagagcgct ggcgcttaaa 92700
 acgcaagatc cgaaggcgtg ccagtatctg ctggagattt acgaatcgga taaccagag 92760
 gaacagctgg aggcgttcaa agtgttccgc aatcggctgg tgctgaaggt ggccaaagag 92820
 ttatggaag tgaacaagat tggcgtgtg agacagtaca ggctgaaacg ccagaccaga 92880
 gtcacgctat ccaacatttt tgtaagaaa gtcgcataaa gcaaaaaccg gccaatcggc 92940

gggtttttc atgcgcattc ggcgatga cgtcgacgtg cgataagtga agaagcgata 93000
 ttttcaatct caacaaagtc tttgagacg ctattgcga gggccaaatt ccacttactt 93060
 aatagcgag cattgtgtgc cagctctgcg ttttcttaa ggcgctcatt ggcttcaagc 93120
 cagttcgcca catcagccca atcccatagc ggggactgtc cctggattct ctggataggg 93180
 caagggaagt cgccaccacc acgaagccca tctttaagca tggtaattgc ttgtcgggac 93240
 atgcccgtca tttcagctac atcgctcagg ccaactaagg ccgagtcgac tgattctaca 93300
 atcgcgccga taccggcaga ttcatattg tcgaccgctg atgcaatggc tgcattccagc 93360
 gatttggtt cgcggtcgaa ctcaacatag acggagtctc catatgcgca acaatcgca 93420
 tcgccacagc cgctttcgta cagcgcatct tccaatcctt cggctcata ggttacgcct 93480
 gagagagtca gagggaagt ataaagcgcc ataaacctc ttatctaaa gtgaagtatt 93540
 aatgtacctt tggaacaaat ggcgccaaa accgccacta actactattt ttgtctac 93600
 tggttttga tgcgaccaca ctggtcgacc gcttgctga tttgcgtggc atggtgctc 93660
 ggtacatctg gaggcgacca tacattctg tggtgactg tatgttcacc tgatttatcg 93720
 ccgcagcgca gcttcagaa gcaatgtgct gacttacctg ctggaacca aaccagcct 93780
 ttactcaacg cgtattcaat ggctcttga atatgcttat tcggatgta tttcatttc 93840
 ctccgatgtc attatgatag gtatagtgtg agcgcggtc aacactgtct attttctgac 93900
 gtctacggcc gcagaaaacg gctatagatt atcagaacac tccctgttt catcaacta 93960
 ccgacccac ccctaactt ctctctta taagctccat ccttcattc tttcatgga 94020
 aaattgatat atagaaataa gctggaacat atcaaatga gtgcagatat ctacgaaaa 94080
 atcatgtccg atctggagtt cgaccgcgac aatcttgagg aagtctggcg tcagcaaccg 94140
 cgctgttga tggagtacgg ctctaagctg gcgcgggcag aacgcgaggt cgcagatga 94200
 aaactctccc tcgatcgat tgaggcaaaa atctactaca atgagcgtaa gaacctgagt 94260
 atgaacggca ttaagtcaa tgaatccgta ctggaggcga aggttagaac caaccgcaa 94320

tacctcgcaa agcgccagaa actcgatgat gcccggcaca ttgcagatct atacaagcac 94380
 gctgtaaccg ccttctctca ccgccgtgac atgattgtcc aggcgtccaa aatggctatc 94440
 gtggagattg aacgcttggg cgccgaacgt ttccactcgc cccgttaatt tatectagat 94500
 gataagtaag tactgatcta ttatccttct cgctcgaaag agccacgaat aaacgaatgc 94560
 ccaacgcgca tagcgccaat ggccacaatc acaaaaagga gaaatacatg tetaagtcac 94620
 tacttgatct gcttaacaag acccgtggcg atattgcttc taaacgtggc aataacgttg 94680
 atttgacccg tctgaaagac ggcaataact atctgcgcat tttccgaac aaggacgacc 94740
 cgaatgggtg gttctccag actttcggtg tgcactacgt taagcatcag aatgaggaag 94800
 gcaaagatgt aaccaccgcc tacatctgcg aacagcacac ccacggccac gcttgccagc 94860
 tgtgtgagat gggtatggaa ggctgtgctc gcttaaggg caacaaagcg atggaagagc 94920
 gcattaacag tatgcgtgct acaccgcgtt atctggtaa tgggtgtctg tctgcgcgag 94980
 aagactttgc agacgcagag aaatgccagt tgattgagct gccgtctacg gtcttcgacg 95040
 atatctgcaa agtgatgtcc gaagatattg ctgatgatat cggcaacca ctgagcaaag 95100
 aagaaggcta tgcgttcctg attaaagcgt ccggttcgg tcgtgacacc aagtatgacg 95160
 tatccccgaa acgtaaagtc taaaaggcg acattcctga gaagctctgg actaccaac 95220
 acgatctgat cgcatacgcg aaccaggctg acgaaacccg tctgtgtct acggctcgca 95280
 ctatgggtcg tctgattggt attgcggctc cggcagcaac aatgtcctct ccggccattt 95340
 ctccgctgc aaaatcagct gctgctgaac tgccaggctt tggtctatc actggtcata 95400
 cggaaggcgc agctgctgct gctacagcac acacaccggc tccagagtcc accagcctgg 95460
 ttgatgaaga gatcctgcgt gccgctgaag ctgagttcaa accggaaact aaaccggaaa 95520
 aggttaaagc tccggaagcc gccgcagctg caagtgttc cgcactgct gccgctgcat 95580
 ctgtaccagc tgacgaaggt ctgatgacc tgctggctga actggacgct ctgtaatccc 95640
 ataacgtgac cagtaaggcg tctacggacg ccttactttt tggaaggagt gtaccggtga 95700

attatctctt tgtggacggt aacagcctgg gctattacca ccagcaatcc gacaaattac 95760
 acaacggcga gatggaagtt caggcggctt ttggcttcgt gaagaacgtt cgtcgttacg 95820
 cctcaattct ccatgcccgc ccaatgatct tgtgggatgg attcagcgac aaacgtcgcg 95880
 acttctaccc ggagtacaaa gcgaatcgcg atgacgaccc ggatatgaag aagatgaaag 95940
 aaggttttgc catccagaag ccgatcatct tgaaaatgat gaccgcgctg ggcgttaacc 96000
 aactcattgc aaaggatgca gaagcggacg acctggcagg aatgctggtc tctcgcctgg 96060
 ctccgcagcc gaccgttgat catatctacc tgctgactgg cgatggcgac tggttcagc 96120
 tggttcgcga gaatgtgagc tgggtaagcc tgcgtgaaga tgccaagcac aagcaggtga 96180
 acttgaaca gtctgcagag ctgaccggtc tgccgacgcc acgcgcgttt ctggaagcga 96240
 aagcgttgca gggcgatacc tcggacaaca tcaaaggcgt aggtggcatt ggtgatggtg 96300
 gcgcgaaaga gctgcttcat gaatggggaa gtgtggccgc aatggtacgc ggcattaacg 96360
 acggctccat tgtcatcaac aaaggctcgt ataagacggc attcaacaag ctggcaaaga 96420
 acgccttcaa cgagaagaca ggctgccgga tgctgaagc cttaagcgc aacatgatgc 96480
 tgatgaacct tatcgacaca aaattcccac ccagcgaaat cgagtcgatt aaaggcgcac 96540
 gcgacatgaa cgccttcgaa cagatgtgtt gcgagctgaa ttccggctcg ttctggaag 96600
 atctggaagt gtttgttctg ccatttgaga ggtactgctg atgctgaaat ccatcattaa 96660
 tggcggggca actacgcca ccatgctggc taaagagatt gtctctgcc acggcgaaca 96720
 cgctgtggtg gcgctgccga acattctggg cgctgctggc atttctgcta ctgagcgtga 96780
 gtctgcgctg gtcagcgagc aggtcgtgaa gatcatcgct cgcgtcgcca aacacctgaa 96840
 ccacgacgca atcaagtttg acgaagccgc agcttcgaag cgaatcaacg aatcaaaagg 96900
 agcctaata tggcaaaagg caaatccgca ctggcactgg cgctgaaaaa gaaaatcggc 96960
 agcaatgacg agattcagaa ggtctccac tggaattgact ccggtttccc tccactgaac 97020
 aaagccattt ccggacgtta cgacgggtgtt ttccgtgtg ggcgtatcgt tgaagtcttc 97080

gggccacca ggcgcggtaa aaccttttg ggcacggctg cgatggatc agcacagaaa 97140
 caggatggtc tggccgtatt ccttgaccac gaaaacagct tcgacgttg tctgcggtg 97200
 gcgaatggct tgaacgccga cgaagacgac ggtcagtggg tctacaaaca gccggatacc 97260
 ttcaagact cgttgagct gatcggcaca atcctcaagc tggcgcgca cgaagagctt 97320
 atcccggaaa cagcccctat ctgcatcgtt gccgactctc tggcgctgat ggtaccgaac 97380
 tcgaaagctg agaagttcga caagatggca gaaggcactg cgaaggacaa agatcagctg 97440
 aacatgaacg acaacacggc gctggcgcg cgcacgagt cgaactccc tactctggcg 97500
 ctttggcg gtaagtacaa cgcgtgcatt atcttctaa accaggtgcg taccaaaatt 97560
 ggcgtgatgt ttggcgatcc gactacgtct ccggcgcg actctccgaa gttctacgcg 97620
 tcggtgcgca tccgtctggg agcatccgtc atgaaggatg gcaaagagaa gatcggacag 97680
 gacgttggcg ccgagtgc taaaaacaaa gtcgcgcctc cgtttggtaa atgctcatgg 97740
 aaattctact tcgaccgac tcgcgggctg gacgtcatc aatctctgt tgagtacatg 97800
 ctggaagaag gatactgcc aaagaacgcc agcgggctg tggaaattag cgataagaga 97860
 tataccaaat cgcagatcgt cgagatgtac cgcgagaagc cactcccgga aatcatcgca 97920
 gcactccagg cgatagacga acggcgagcg aaagagtcgt cccagcaga gacagaagaa 97980
 gcgtaatcac aaggcgccca ttggcgccct tttatactt gaaaatatat aagtacttac 98040
 ttattatttc tgcacaaaa cgacaaaagg aaacacatga ttaagggtta tctcatggct 98100
 gtttcagcgg tgggtcagt ctgctttac tacggtttac tggttccatc gcttatctca 98160
 gctaaaagcg atctggcctt cttatcgga ctgccaatc ctgtagtct cccggttgcc 98220
 ttgttaaaag ctggccgcag gtatatcaac tcaactcaata aaactaagga gaagtaagta 98280
 atgaagaaag gtttactggc ggtgactttg gctgctatt gcacaatggg tctgaccggc 98340
 tcgcatcgcg tggaaccggg atacgttggc attaaggtaa acaaatggg tgaagacaaa 98400
 ggtatcggtg aagttgtcgg cgttggccgt cagtggactg gtctgaatac cgagctgtac 98460

acctcccca ctttcaaca gatgaaaacc tacgatgagc cggtcacatt ccagatgagc 98520
 gacggtacag ccacggcca caaaattggt gtggcatatc tggtaatcg caacaaagta 98580
 actaccgtat tccagaccta tcgcaaaggt gttgacgaca ttaccgacac tgatctgcgc 98640
 cagaagattg cggattcact gaaccgtctg gccagccgca tgactaccga cacgttcac 98700
 gacggtggca aggcgtctct gctcgacaat gcgttgaaag acattcaggc agaaatgtca 98760
 ccggtaggta ttgaggttat tagcctgtca tgggtgggca aaccagacta cccggacacg 98820
 gtcacgaat ctatcaatgc caaagtgacc gcaaccaga aaacgtcca gcgccagcag 98880
 gaagttgagc agcgcaaggc agaagcgaac atgctgcgtg aacaagccga aggtgaagcc 98940
 gacgctatcc gcaaactgc tcaagcagaa gctgacgcca tcaagttgcg cggatgaagca 99000
 ttacgtcaga acccgaacgt catggagctg gaagccatca acaaatggaa tggccagttg 99060
 cctcagtaca tgactgaagg ggctaatact ccgtttatcg cgttgaagta acaccctttt 99120
 caaagatacg gcgtccactt ggacgccttt tttattccg tattatcacc aacaagaaaa 99180
 caaattggtt actaatcgg aattaacttc cgttgaagta aaaagtgaac acgccacgca 99240
 atttctgaaa gaaggagatg atgaatgaaa aactacgctg aaatgacgga ctttgagatt 99300
 aactgcctgg tcgcggaagc aaccggccat cgccccctca tctcacaata tggctggaaa 99360
 ggctcacaag ttggagatta caaaaaagtg attgcgattg ggccaaacgg agcgggttct 99420
 ttcgactggt gcaacaatcc ggtagatgcc tgggacatca ttccagaaa cagaatcggc 99480
 atcattccag ccagacaggc tggcgagtgg agagcggccc acaggctggt ggatagctca 99540
 acaccacaac atctgatcca gaaccctaac ccttcagag cggcaatgat cgtgtttctt 99600
 ttgatgcagg agaaaaaacg tgaaaaaact gtatgacgcg gccaacgctg cgctggatgt 99660
 agtggatacc gaaattgccc agggcttccc ggagccagaa tggcgacgc agctgcgtga 99720
 ggcgattgca gagatgaacg caccggaacc ttcagaagat gaagccgact ggcagcgttt 99780
 catcagaatg tacgcggaag agattggccc gacccaacc gctgaacagg ccatgctgct 99840

caagtacttc aaggaggctg gggagaatct gccggttgat gacacaccgc actggtttca 99900
 cgccgcctgg cgtaagttcg acgtgatcta caccgcgat ctgggaagta aagatatggt 99960
 cgtctggcat ctgatgcaca ttgataaggc tgtcgaccgc acgctggaga agttctttcc 100020
 accagcctga acacaatgat tgtgtaccgc atggcgcaca ttagtataaa taagtactta 100080
 ccaacaagga gaagcacatg aagattttgg ttcgcatttc atcaagcacc gactatgacg 100140
 ttatccgtt gttcatggtc aagtgcgacg gtctgaacga tgaagaaatc caagcggcaa 100200
 ttgagcga tctcgttgag tatactggta tggatgcgga ttctgtgcat gtcgatgatg 100260
 acgggtgttg ttggagcaat ggtagttgtt ggtatgtaga cgacacgacg ccggttaagcg 100320
 atgaagacgc tgctcacctt gagcgtattt taggcacag cacttttgag tgatattac 100380
 agcaaataat atataagta gtatttacct atcatgaaa ccgtattaga caccttatta 100440
 cttattatct cgatagcttt tgtgctgat tgcatttca ccggagtaat ccataaagcg 100500
 ctggcgcctg ttaatagcg gatgattaat gcgctggccg tagtgctgtt attcgactca 100560
 gcattcggcg ttatccaagg agtcgtggca tgaagaaaac agccctggct ctggcactgt 100620
 tcactctccc tgtctacgcg aacacacatg tctatgagtg tgaaatgtct gtggccgaag 100680
 tgaaaaacga cgagatctgc aacgtcgtca aagctaacta cggcgcgatg attgtggaca 100740
 gcggcgaaca gttttatgtc gtgcgcgatg atcgcgtcct gtcttcaccc tatctacca 100800
 gacgtaacgg caaactgtct ggcgtgggtg aagataagtt cgtttacgac aaatcaggtg 100860
 atgtttacgg cgttcacgcg aagaacgcca gctacctttt cgatgactgc aaggaggttg 100920
 gttgatggcg gttacaatgg caggtcttga aatcgaaaaa acaagcggct actggcgtgc 100980
 caaagggttt 100990

<210> 3

<211> 9960

<212> DNA

<213> *Yersinia pestis*

<400> 3

tggcgtgatg atggaactgc aacatcaacg actgatggcg ctgccgggc agttgcaact 60
ggaaagcctt ataagcgag cgcttgcgt gtcacaacag gcagtagacc aggaatggag 120
ttatatggac ttctggagc atctgcttca tgaagaaaaa ctggcacgtc atcaacgtaa 180
acaggcgtatg tatacccgaa tggcagcctt cccggcgggtg aaaacgttcg aagagtatga 240
cttcacattc gccaccggag caccgcagaa gcaactccag tcgttacgct cactcagctt 300
catagaacgt aatgaaaata tcgtattact ggggccatca ggtgtgggga aaacccatct 360
ggcaatagcg atgggctatg aagcagtcg tgcaggtatc aaagttcgt tcacaacagc 420
agcagatctg ttacttcagt tatctacggc acaacgtcag ggccgttata aaacgacgct 480
tcagcgtgga gtaatggccc cccgcctgct catcattgat gaaataggct atctgccgtt 540
cagtcaggaa gaagcaaagc tgttctcca ggtcatcgct aaacgttacg aaaagagcgc 600
aatgatcctg acatccaatc tgccgttcgg gcagtgggat caaacgttcg ccggtgatgc 660
agcactgacc tcagcgtatg tggaccgtat cttacaccac tcacatgtcg ttcaaatcaa 720
aggagaaaagc tatcgactca gacagaaacg aaaggccggg gttatagcag aagctaatcc 780
tgagtaaaac ggtggatcaa tattgggccg ttggtggaga tataagtgga tcactttca 840
tcgctcgtg acacctgat gaattcacgt gttcacgcct gaataacaag aatgccggag 900
atacgcagtc atattttta cacaatttc taatcccgac aaggtcgtag gtcgttatag 960
gaaaattctt agcaccattc cggaacaatc agaacagcag gccatgaacg actgacaaca 1020
ttacgaatat aaaaaacgca cccgggccag acattcccc tactgattaa accagccgga 1080
ctgtccacg gaacggcttt tttaaaccga cacacagtct gagtacagat acatgtcacg 1140
atgatgcagg attagcggaa gagtgtgagc acgttccgg gaactgtggt gaaccatagc 1200
tcaatattcg agtgagggca taccggaaac gcgtcagat tcgttgtaac gcgattttcc 1260

gtaccgggca atttttcag ttgtttttc gtttcatgtc gtcagaaacg ttctgagcgc 1320
 gtttcggca tctgatgcta cgcaaaccat ccccatggc agttagacgc cggaacacg 1380
 cgggtgtcgt tttagcgtat cgacgggacg gcgtcgagaa gcacaaaaa cagatgttgt 1440
 actcagtcag ttgttttaca gacagcactg cggcagattg aaaaagtacc gtactttcag 1500
 gaatgtccag aaaccatgtg tcagacttcg ttctccccct tccgggtgaa ttttttgc 1560
 atccgttcag gaatctcttt ataacgatta ctccatttca ggattttta tgtggcgttt 1620
 actacaggca ggatattcaa aggcaaaaaa atcccccgga acaggcggaa cccggacagg 1680
 gggagaacga atcgctaaat aattttcgta gttgtatttc ccatcgttgc tactgcaacg 1740
 ggatgaattt gccgcagttt atcctgtaaa acaatcctga ttactcaca ctccacatat 1800
 cactgacgga gcacaacgga atagtgaaca aacaacaaca aactgcgctg aatatggcgc 1860
 gatttatcag aagccagagc ctgatactgc ttgaaaaact ggatgctctg gatgccgacg 1920
 agcaggcggc catgtgtgaa cgactgcacg aactcgcgga agaactccag aacagcatcc 1980
 aggctcgctt tgaagccgaa agtgaacag gaacataacg aagctcccgg agacggtcac 2040
 agcttgtctg tgaacggatg ccgggagcag acaagcccgt cagggcgcgt cagcgggttt 2100
 tagcgggtgt cggggcgcag ccatgacca gtcacgtagc gatagcggag tgtatactgg 2160
 cttagtcatg cggcattcagt gcggattgta tgaaaagtgc accatgtacg gtgtgaaatg 2220
 ccgcacagat gcgtaaggag aacatgcaga tgccgatgct ctccgcttc ctgctcact 2280
 gactcgtgc gctcggctgt tcggctgcgg cgagcgggtg ctgctcactc aaaagcggtg 2340
 atactgttat ccacacaatc aggggataac gccggaaaga acatgtgagc aaaaaacgaa 2400
 gacccagaa aaggccgcgc cggaggcgtt tttccatag gtcgccccc cctgacgagc 2460
 atcacaaaaa tcgacgtca agtcagaggt ggcgaaacc gacaggactt aaagatacca 2520
 ggcgtttccc cccggaagct cctcgtgcg ctctcctgtt ccgacctgc cgcttaccgg 2580
 atacctctcc gcctttctcc ctccgggaag cgtggcgctt tctcatagct cagctgttg 2640

gtatctcagt tcggtgtagg tcgttcgctc caagctgggc tgtgtgcacg aacccccct 2700
 tcagcccgac cactgcgcct tatccggtaa ctatcgtctt gattccaacc cggtaaagaca 2760
 cgactttacg cactggcag cagccattgg taactgaaaa gtggatttag atacgcagaa 2820
 ctcttgaagt tgaagcctta tcgcggctac actgaaagga cagcatttgg tatctgtgct 2880
 ccacttaagc cagctaccac aggttagaaa gcctgagaaa cttctaacct tcgaaagaac 2940
 ccacgcctga gaacgtgggt ttttcgttt acaggcagca gattacgcgc agaaaaaag 3000
 gatctcaaga agatccttg atcttttcta ctgaattgcg ctcccgatca gttcagcaga 3060
 agattatgat ggggttctat ggggtattgct gcggtaacac ccatgttact tgaggttgta 3120
 tgtagtctgt gtagaattat acacataagg cttaaactgc tctttttt caatatgaa 3180
 ttggaagttc attgactaca taaatagatt attccaaata atttattat gtaagaacag 3240
 gatgggaggg ggaatgatct caaagtatt ttgcttggct ctcattttt tatcatcaag 3300
 tggccttgca gaaaaaaca catatacagc aaaagacatc ttgcaaaacc tagaattaaa 3360
 taccttggc aattcattgt ctcattggcat ctatgggaaa cagacaacct tcaagcaaac 3420
 cgagtttaca aatattaaaa gcaacaccaa aaaacacatt gcacttatca ataaagacaa 3480
 ctcattgatg atatcattaa aaatactagg aattaagaga gatgagtata ctgtctgttt 3540
 tgaagatttc tctctaataa gaccgccaac atatgtagcc atacatcctc tacttataaa 3600
 aaaagtaaaa tctggaaact ttatagtagt gaaagaaata aagaaatcta tcctgggtg 3660
 cactgtatat tatcattaat agcaagcccc tcattattat gaggggctca tggttatttt 3720
 aacaatccac tatcgatc ttttgcacc agagcgccct ctcgtttacg tctgtcagac 3780
 attccatcaa caatattatt aaaagcattt acaaggccat tccagtcttt tgcgataact 3840
 ttattccata ctgtgggagc agttctggat aacttaaacc cttttgata tccaatagac 3900
 accagtgtg tacgggttct caacggtaaa tcgctgaacc gaagaccgat attagcgtca 3960
 ttgaaaagac cttcaatct atgtgagaat ttatcaatat aaatattaga taagagatga 4020

gcttcattat cagaaagcgt cagaggtgct gttctcactt tatcataagc ctcttccct 4080
cgaagcatat aatacccatc aagtctatct gcaatatact gagggacacc gtcattcaat 4140
aaatcctggt tgcttcgctg accaagggtca accccggaac cgaatgtaac accggtactg 4200
ttaaataat cgctactagg attagacgga aaatgacttg tcggattaaa ccttcaaaa 4260
ccattactgg agaaaatac gtggtaaca atattaccg aacgacgtaa aaattcctc 4320
agtgactaa tattgtcaa gtaatgaca gtgtgtccg ctaggacgat gcgatttcg 4380
ttattatca gaatgtctc gttctcttc twatcgagat gttcaataga ttcggcaatc 4440
gttccctcaa gaaccatgac acggtagact ttacaccgt cttttcctg acctgttca 4500
acagttatt tctgttcgta agacacggc cttcagttt ttgaaattt actttcctg 4560
cggatcttat ttgaatatc actgtcttc tccatctccg tatcaatcg aaacccata 4620
atgtacatca gtttaaaatt actccggcca ggcagatcca cataatgtg taatgaatt 4680
gtaatgaat tagcttcaa atttggtctg taactgctta atgtactcc ggaaaagaga 4740
aaagccggaa caccacctga accattcact accattgtat ctgacataaa aattcctct 4800
taacacataa aaaaacaata agttaaaaaa aaatactgta cataaaacca ctgttttat 4860
gtacagtaat aaaattacg cgctttatt tctctgtcaa taatatgaaa ttcatTTTT 4920
gtgatctgaa tcaactctat aaaaatcagg aagggaagat tcgcagcaga aaaacagcac 4980
cgggtaacat cagaaaaaaa cagaaaggag ataacgtgag caaaacaaa tctggtcgcc 5040
accgactgag caaacagac aaacgctgc tggctgcaact tgcgttgcc ggatacgaag 5100
aacggacagc ccgtgacctc atccagaaac acgtttacac actgacacag gccgacctgc 5160
gccatctggt cagtgaatc agtaacggtg tgggacagtc acaggcctac gatgcgattt 5220
accaggcgag acgcattcgt ctgccccgta aatactgag cggaaaaaa ccggaagggg 5280
tggaaccccg ggaagggcag gaacgggaag atttaccata actcccgta tcagtaccat 5340
cggctcaacg ctggtgtcg gatctgaaa attcgtcaa aagatcatat ttcctggat 5400

attttccacc gtttcttatg tgagcaaagt cacataattc tgtcagacga cgagaaaacg 5460
 gatatcgatt attgtttaat atttttacat tattaaaaat gaaattagat aatcagatac 5520
 aaataatatg ttctcgttca tgcagagaga ttaagggtgt ctaatgaaga aaagtcttat 5580
 tgtggcaacc attataacta ttctgtccgg gagtgctaata gcagcatcat ctcatgtaat 5640
 accaaatata tccccgaca gctttacagt tgcagcctcc accgggatgc tgagtggaaa 5700
 gtctcatgaa atgctttatg acgcagaaac aggaagaaag atcagccagt tagactggaa 5760
 gatcaaaaat gtcgctatcc tgaaagggtga tatacctctgg gatccatact catttctgac 5820
 cctgaatgcc aggggggtgga cgtctctggc ttccgggtca ggtaatatgg atgactacga 5880
 ctggatgaat gaaaatcaat ctgagtggac agatcactca tctcatcctg ctacaaatgt 5940
 taatcatgcc aatgaatatg acctcaatgt gaaaggctgg ttactccagg atgagaatta 6000
 taaagcaggt ataacagcag gatatcagga aacacgttcc agttggacag ctacaggtgg 6060
 ttcatatagt tataataatg gagcttatac cggaaacttc ccgaaaggag tgcgggtaat 6120
 aggttataac cagcgctttt ctatgccata tattggactt gcaggccagt atgcattaa 6180
 tgattttgag ttaaatacat tatttaaatt cagcgactgg gttcgggcac atgataatga 6240
 tgagcactat atgagagatc ttactttccg tgagaagaca tccggctcac gttattatgg 6300
 taccgtaatt aacgctggat attatgtcac acctaatgcc aaagtctttg cggaatttac 6360
 atacagtaaa tatgatgagg gcaaaggagg tactcagacc attgataaga atagtggaga 6420
 ttctgtctct attggcggag atgtgccgg tatttccaat aaaaattata ctgtgacggc 6480
 gggctctgcaa tatcgcttct gaaaaataca gatcatact ctcttttcat cctcccctag 6540
 cggggaggat gtctgtggaa aggaggttgg tgtttgacca accttcagat gtgtgaaaaa 6600
 tcacctttt caccataatg acggggcgct cattctgttg tttgccttg acattctcca 6660
 cgtctttcag ggcattggaga aggtcaaatt agacatggaa cgctactctc ctctctgtag 6720
 gaagctcaac atccaagctt aatttgcctc ccattgcttc aacgtaacgc ttaacgtcg 6780

ccagctttaa atcatttccg cgctgctcca gctttgttac tgctggctgg ctataacca 6840
 tcgcctcagc aactgtttt tgtgataact ggagttctc acgcatcatc tgcaagccga 6900
 cctcaagaat catctcatct gccatttctt taattcgtgt ctggctttca ggtgaacgac 6960
 tggcaatcac ctcatctaata gttctcatta ctgctctcc agtgtgttca gatgtgctgt 7020
 aaattcatcc tcagctatac gcaccagttt ttataaaaac cgttatcat tacttttacc 7080
 tcctgcacaa agaacgatag cccgacgaat cggatcgaac gcataaaagg ctcttatcgg 7140
 acggccagaa aactgaacgc gaagctctt catatttttg taccgagaac ctttcacggt 7200
 atcggcatat ggcttgggta actcagggtc gtaaacctgt agctttttca aatcagccaa 7260
 aaccttttcc tgaagagcgt cttcttgctc atttagccag tcgtcaaate gctggctaaa 7320
 aagtaccatc cacatgctca accctataac ctgtagctta cccactaac aatataacct 7380
 acgagttata tttcaagaa aagctggcta ttaacataa cggcaattg tacgcaccac 7440
 tgaaatgcgt tcagcgcgat cacggcaaca gacaggcaaa aatagcaaca aacctcccga 7500
 aaaaccgccc cgatcgcgcc tgataaattt taaccttatg catatctatg cagccaggcg 7560
 aatcacgaac gaattgcctg cctgatgtaa ctgaaacggg tgtttttcc tgatttggtg 7620
 ggcgtggaag acggaacatg aacgggaaaa cagaattcat gccagatgag cgcgatctgg 7680
 caattaaggc aaaacacagc aacaaagaca cgccagaatc gcgcccggat atgttttaac 7740
 gcgattttca gactcagaca aattcagcag aatgtactc cattaccgg gctgatggtg 7800
 aatacatgcg tatccaggat gactacattt ctggtctgc cacagctctg tctgttgga 7860
 gctttgcct gtccggaaac ctgcttaaaa cgctcccgaaggcctctga accagaaagc 7920
 aacaaaacac aggccattaa gtaaatcgcg ttaaaacacg tctgatggat tgctgcaaaa 7980
 aaaagtcct aatggagcag ggactgttaa acccagtga tagcgtctaa attaaagtaa 8040
 gaatacgacc aggtactctt cagaaaagag attaatccac cgcacagaat aatcaacagt 8100
 aaaaacaaac aacctgatt tttattttt cttttttcg ataaaaaaa aattaaagaa 8160

ataattaate agaacaatcc ttaacttcag ggcattgcct gtgttcatt ttgtgattag 8220
 tctgaaactt ccgaagggtg ataacacccg gtatttttt gctcacataa agcccctct 8280
 tcaggcagag gggcttttc ttgccacca cataaaaaag gccctcacag gaggtgttct 8340
 gtgagggcgt atgataagga ctgaatcgt ggtaatatg tctagtcctg acttttgc 8400
 ctccgaatat aaaaccctgt ttaacggcat gcaaaaccaa aaaataaaaa tgtgacatcg 8460
 caatgccaga taatattgac gcatgaggga atgcgtacc cgaccctgt gtaacgaacg 8520
 gtgcaatagt gatccacacc caacgcctga aatcagatcc agggggtaat ctgctctct 8580
 gattcaggag agtttatggt cacttttgag acagtatgg aaattaaaat cctgcacaag 8640
 cagggaaatga gtagccgggc gattgccaga gaactgggga tctccgcaa taccgttaa 8700
 cgttattgc aggcaaaatc tgagccgcca aaatatacgc cgcgacctgc tgttgctca 8760
 ctctggatg aataccggga ttatattcgt caacgcacg ccgatgctca tcctacaaa 8820
 atcccggcaa cggtaatgc tcgcgagatc agagaccagg gatatcgtgg cggaatgacc 8880
 attctcaggg cattcattcgt ttctctctcgt gttccctcagg agcaggagcc tgccgttcgg 8940
 ttcgaaactg aaccgggacg acagatgcag gtgactggg gcactatgcg taatggtcgc 9000
 tcaccgctc acgtgttcgt tgtgttctc ggatacagcc gaatgctgta catcgaattc 9060
 actgacaata tgcgttatga cacgctggag acctgccatc gtaatgcgtt ccgcttctt 9120
 ggtggtgtgc cgcgcgaagt gttgtatgac aatatgaaa ctgtggttct gcaacgtgac 9180
 gcatacaga ccggtcagca ccggttccat ccttcgtgtt ggcagttcgg caaggagatg 9240
 ggcttctctc cccgactgtg tcgcccctc agggcacaga ctaaaggtaa ggtggaacgg 9300
 atggtgcagt acaccgtaa cagttttac atcccactaa tgactgcct gcgcccgatg 9360
 gggatcactg tcgatgttga aacagccaac cgccacggtc tgcgctggct gcacgatgc 9420
 gctaaccaac gaaagcatga aacaatccag gcccgctcct gcgatcgtg gctcgaagag 9480
 cagcagtcca tgtggcact gcctccggag aaaaaagagt atgacgtgca tcttgatgaa 9540

aatctggtga acttcgacaa acacccctg catcatccac tctccatcta cgactcattc 9600
tgcagaggag tggcgtgatg atggaactgc aacatcaacg actgatggcg ctgccgggc 9660
agttgcaact ggaaagcctt ataagcgag cgcctgcgct gtcacaacag gcagtagacc 9720
aggaatggag ttatatggac ttcctggagc atctgcttca tgaagaaaaa ctggcacgtc 9780
atcaacgtaa acaggcgatg tatacccgaa tggcagcctt cccggcggtg aaaacgttcg 9840
aagagtatga cttcacattc gccaccggag caccgcagaa gcaactccag tcgttacgct 9900
cactcagctt catagaacgt aatgaaaata tcgtattcac tggggccatt caggtgtggg 9960